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ABSTRACT

The purpose of this study was to project and analyze the prospective long-term trends in the socioeconomic context of the educational systems of European market economies and to outline in global terms the probable implication for education and training in the future. Composed of three chapters, the chapter 1 focuses on projected long-term demographic changes: the quantitative development and age structure of populations and their basic determinants up to the first half of the next century. The direct and indirect impact on education and training is discussed in detail. Chapter 2 looks at the social and cultural context of education, highlighting value changes in various fields (work, family, religion, politics) and their societal effects. The consequences of socio-cultural change and multi-cultural societies for formal education are outlined. Chapter 3 gives a detailed overview of past and expected future developments in the economy (economic growth) and the labor market (labor force participation, unemployment, new forms of working). The implications of structural change in the economy and the introduction of new technologies for future qualification requirements are summarized. A 66-item list of references is included as are a number of appendices. (Author/DB)

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PROSPECTIVE TRENDS IN THE SOCIO-ECONOMIC CONTEXT OF EDUCATION IN EUROPEAN MARKET ECONOMY COUNTRIES

M. WEISS, H. VON RECUM
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German Institute for International Educational Research

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Introduction

The purpose of this study is to project and analyze the prospective long-term trends in the socio-economic context of the educational systems of European market economies and to outline in global terms the probable implications for education and training in the future. The study was prepared at the request of the Division of Educational Policy and Planning of UNESCO within the framework of UNESCO's program in the area of coordinating educational policies and plans with those in other sectors.

The scope of the study is the European OECD countries. The assessment of future trends in the contextual conditions of their educational systems is based on material from different sources. As far as possible, quantitative projections from the international agencies (UNESCO, OECD, EEC) have been utilized. Since the focus is on trends common to most countries, specific national developments have only been given attention in the case of significant deviations from the common trend.

The first chapter is concerned with the projected long-term demographic changes: the quantitative development and age structure of populations and their basic determinants up to the first half of the next century. The direct and indirect impact on education and training is discussed in detail.

The second chapter focuses on the social and cultural context of education, highlighting value changes in various fields (work, family, religion, politics) and their societal effects. The consequences of socio-cultural change and multi-cultural societies for formal education are outlined.

The third chapter gives a detailed overview over past and expected future developments in the economy (economic growth) and the labor market (labor force participation, unemployment, new forms of working). The implications of structural change in the economy and the introduction of new technologies for future qualification requirements are summarized.

I. DEMOGRAPHY AND EDUCATION

The impact of demographic developments are felt in the educational sector more rapidly and strongly than in almost any other public sector. Demographic projections have to make assumptions about the development of three basic determinants: fertility, mortality and migration.

A. Projections of Fertility, Mortality and Migration

(1) Fertility

Since the mid-1960s almost all European countries have experienced a significant decline in the fertility rate. In the past few years the decline has slowed down and in some countries the fertility rate has stabilized at a low level (exceptions are Ireland and Turkey). In a number of countries (Austria, the Federal Republic of Germany, Denmark, Italy, Luxembourg, the Netherlands, Switzerland), the fertility rate in 1983 was around 1.5 (Ireland: 2.7, Turkey: 4.0).

This decline in fertility is a secular phenomenon caused by the complex interaction of a number of factors, to be found on the micro-level (individuals and their families), on the meso- level (social groupings such as relatives, friends, colleagues) and on the macro-level (economic and societal structure, norms, values) (Buttler 1989). The living conditions characterized by this group of factors have undergone manifold changes in the last few decades, while at the same time being reevaluated by individuals. In broad terms these changes may be described as rationalization (planned structuring of living), economization (calculation of costs and benefits) and individualization of life spheres (Bolte 1980). These are widely believed to be relatively stable behavioral determinants: this means that the "low fertility syndrome", which to a greater or lesser degree affects most of the Western industrialized nations, will continue to determine the development of populations in the future as well. In some countries (e.g., the Federal Republic of Germany), the population decline will take the form of a "demographic implosion". At present there are no signs of any change in the trend. This seems to justify assuming the existence of "post-industrial" generative behavior when making population projections for most countries of the European region, that is, a fertility rate markedly below the level required to maintain the population size at a constant level.

This assessment of the situation contrasts with the optimistic assumption of the OECD (1988a) in its "most likely" "medium fertility variant" that "the present low levels of fertility are unlikely to persist over a long period of time" (p. 17), because the prospect of a shrinking population will induce a return to replacement level rates. Thus, the OECD projections assume a fertility rate[1)] of 2.1 by 2050. It is evidently considered realistic to expect people to respond to the process of population decline by developing a new awareness for population problems (similar to that for environmental issues) sufficient to induce behavioral modifications.

(2) Mortality

In contrast to fertility, mortality plays only a minor role in the future development of population numbers in the countries of the European region, but - as we shall show - is of great significance for the development of the age structure. Since the beginning of the 1950s, mortality has steadily dropped. Between 1950 and 1980, the average life expectancy at birth in the European OECD countries increased from 68.9 to 77.5 (= +8.6 years) for females and from 64.8 to 70.9 (= +6.1 years) for males. The increase in life expectancy for 60-year-olds within this period was less pronounced (+ 3.4 years for females, + 0.8 years for males).

It is generally expected that life expectancy will continue to increase in the future, but at a moderate rate. OECD experts assume that between 1987 and 2030 life expectancy at birth will increase on average by two years for both sexes, and then remain constant for the rest of the period covered by their projections. Progress in medical technology and greater health awareness may well lead to further substantial reductions in mortality at advanced ages. There could also be a higher rise in average life expectancy in countries which have below-average life expectancy at present.

(3) Migration

Whereas with regard to fertility and mortality, similar trends (albeit sometimes differing in level) can be observed in the countries of the European region, this is not the case for migration. Particularly owing to considerable disparities in levels of economic development and in living conditions (see Heijke 1987), the European countries have been very differently affected by emigration and immigration in the past. This is reflected in the classification of countries into traditional "receiving countries" (Belgium, France, the Federal Republic of Germany, Luxembourg, the Netherlands, Sweden, Switzerland) and traditional "sending countries" (Italy, Greece, Portugal, Spain, Turkey, Yugoslavia).

Of the just under 15 million foreign residents in Europe at the beginning of the 1980s, between seventy and eighty per cent lived in the receiving countries. After the first "oil shock", the most important of these countries decided to stop the immigration of any more foreign workers. However there was still further immigration owing to family reunion, i.e., a large part of the foreign population living in the receiving countries has become quasi-permanent (for details, see Maillat 1987). While return immigrations to the sending countries have remained limited, since about the middle of the 1970s the more advanced of these countries (Greece, Italy, Spain) have experienced increased immigration from countries of the South and East Mediterranean and former colonies, i.e., the former have in turn become receiving countries (for details, see Simon 1987).

The anticipated demographic and socio-economic conditions are of potential relevance for the future development of migration. Migration is not only a determinant of population development, but is itself also determined by it. Migratory pressure will be strong in some sending countries, in which, as we shall show below, the working-age populations will increase far in excess of the potential of their employment systems to absorb them. The greatest pressure will come from Turkey, where the working age population is expected to increase between 1985 and 2000 by an average of 2.38 per cent per annum. Migratory pressure on the countries of the European region will also be intensified by the deteriorating situation in the developing countries, which will experience a tremendous further population growth. This contrasts with a stagnant or declining population in most European countries, especially in the traditional receiving countries (for details, see Appendix 1). The accompanying decline in the working-age population and the relatively favorable economic development, generally expected particularly in the EC countries as a result of the completion of the common market in 1992 (for details, see Chapter III), will probably make the European region still more attractive for immigrants. Nevertheless, (legal) immigration is unlikely to increase very significantly. At least in the short- and middle-term, there will probably be relatively little demand for foreign labor, since the European market economy countries will place priority on trying "to absorb or reabsorb the young unemployed, women who want to work, and those who have been made redundant" (Golini/Bonifazi 1987, p. 134). The fact that demand for unskilled labor will continue to decline in the receiving countries will also lessen demand for migrant workers. Last but not least: the politicians responsible in these countries might deem the social and political costs of long-term admission of further immigrants to outweigh the economic benefits, i.e., their restrictive immigration policies are unlikely to change very much in the foreseeable future. Hence migration will be a minor element in population change in the European region[2]. In view of the uncertain long-term political development, it therefore seems justified to assume (as does the OECD population pro-

jection) a continuation of relatively low levels of net migration or zero net migration. The assumption that future migration will have only marginal effects on the size of the population is probably on the whole still tenable even if one considers the generally higher fertility rate of immigrant women. Past developments have frequently shown that the fertility rate of these women gradually adapts to the level in the receiving countries.

B. Projected Trends in the Development and Age Structure of Populations

As far as the development of the total population is concerned, Appendix 1 shows that within the next few decades most European countries will experience a decline in population, although the beginning and intensity of the decline will sometimes vary considerably. In Denmark and the Federal Republic of Germany this decline already started in the 1980s. According to the OECD projections (medium variant), these two countries will also have the largest decline in population between 1980 and 2050, with 29 per cent and 33 per cent respectively. The decline will be under 5 per cent in France, Luxembourg, Norway and Spain. In Great Britain the population level will remain stable, while it will rise in Ireland (+25 per cent) and especially in Turkey (+136 per cent). Taken as a whole, the population of the European market economies will slightly increase by some 5 per cent between 1980 and 2050. In the case of the low fertility variant the decline in a number of countries will be much more pronounced (Federal Republic of Germany: 45 per cent, Denmark: 42 per cent).

In addition to changes in population size, changes in the age structure of a population represent a fundamental aspect of demographic change whose direct relevance for the educational systems derives from the age-specific demand for educational services. Appendix 1 shows the projected trends for four age- groups.

Of interest is firstly the development of the 5-14-year-old age-group, which is more or less entirely "absorbed" into the educational system in all European countries. Changes in the numbers of this age-group determine enrollments in the compulsory school sector. In pre-primary education and post-compulsory education and training, educational participation must be added to the demographic factor as a second determinant of enrollments.

Between 1990 and 2000, the number of 5-14-year-olds will develop differently in the countries of the European region. In some countries the decline of the 1980s will persist but will be less dramatic. In other countries there will be a slight to moderate rise. A trend in the same direction but of differing intensity is projected for the first decades of the next century. On average the number of 5-14-year-olds will be roughly 14 per cent lower

in the year 2020 than in 2000 (low fertility variant: 26 per cent). There will be an above-average decline in Denmark (-22 per cent), in the Federal Republic of Germany (-29 per cent) in Italy (-24 per cent) and in Spain (-25 per cent), a below-average decline in Sweden (-8 per cent), Greece (-8 per cent), Turkey (-3 per cent) and Great Britain (-2 per cent). If the assumption underlying the OECD projections that the fertility rate will adapt to replacement levels proves correct, then there will again be a slight rise in the number of 5-14- year-olds in a large number of countries. Otherwise the decline will continue.

The projected trends for the 15-64-year-olds, who basically represent the working-age population, show that a number of European countries will already be experiencing a decrease in the absolute number at the end of this century, a process which will have overtaken all European countries (with the exception of Turkey) by the second and third decade of the next century, and (assuming the medium variant) will last until the end of the projection period. This development will be accompanied by a rise in the average age of the working-age population as a result of decreases in the proportion of entry level workers.

If we turn to the over-65-year-olds in the European OECD countries, we see that their numbers will steadily increase over the next five decades by about two thirds, from 53 million in 1990 to 87.3 million in 2040.

The trends outlined for the various age-groups will lead within the projection period to a considerable shift in the age structure of the population. Between 1990 and 2040, when the aging trend is projected to peak, the (unweighted) average proportion of those aged 65 and over will rise from 13.3 per cent to 22.1 per cent. In contrast, the average proportion of those under 15 will decrease from 20.3 per cent to 17.8 per cent, the proportion of the working age population from 66.3 per cent to 60 per cent (medium variant).

C. Implications for the Educational System

The projected trends in development and age structure of population have direct and indirect implications for the educational system. The effect on the development of pupil numbers in the compulsory education sector, which - seen in total terms - is entirely dependent (ceteris paribus) on demographic factors, is self-evident. In the case of differentiated school systems such as, for example, in France, the Federal Republic of Germany and the Netherlands, in order to make a detailed projection of enrollments in the various educational courses, it is also necessary to make assumptions about

educational participation. This also applies to projections of enrollments in pre-primary education and at the post-compulsory stage, which is characterized in most countries by a diversity of education and training patterns. Changes in educational participation may reinforce, alleviate or compensate for the demographic effect.

Projections of educational participation are, as examples from the past show, highly uncertain because of the large number of determinants, the relative influence of which it is, moreover, often difficult to judge. It has not been uncommon for projections of educational participation to be overtaken by reality only shortly after their completion (especially in higher education). Assumptions about trends in the future development of educational participation in the European market economy countries must take these basic problems of projections into account as well as the fact that the (institutional) parameters influencing educational participation often vary greatly in these countries. This applies particularly to the structure of education and training at the post-compulsory stage.

In the expansionary phase of the 1960s and 1970s, the demographic effect was reinforced in most countries by a simultaneous - and in some cases considerable - increase in participation rates in post-compulsory (secondary and tertiary) education (see OECD 1985, UNESCO 1988). And also the impact of the demographic decline on enrollments, which had already taken effect in the educational systems of some countries in the 1980s, has been alleviated or even over-compensated by the further increase in educational participation (see for the Federal Republic of Germany, for example, Blien/Tessaring 1986). One, and in some cases more than one, year of post-compulsory education is now the norm in most countries (OECD 1989a). The constellation of conditions determining the development of educational participation is historically unique, and thus does not permit simple extrapolation into the future. A fundamental change in the trend towards (high) educational aspirations is unlikely (see also Chapter II); however, we may assume that there will be some changes in the contextual conditions affecting educational participation.

Despite considerable expansion in the 1970s and 1980s, participation in pre-primary education is still under- developed in some European countries (see OECD 1989b, p.79). In these countries a further rise in enrollment rates at this level may be expected. This trend will probably be reinforced by the rising employment rates of young mothers and the increase in single- parent families.

In those countries with a differentiated (selective) secondary school system, experts generally expect the trend towards higher- level qualifications to continue - among other things in view of the continually increasing demand for higher qualifications in the employment system (see Chapter III). In France this has even been made a policy objective in the school reform plans: in future it is planned that 80 per cent of young people will leave school with the baccalaureat (Loi d'Orientation 1989). Surveys conducted amongst parents in the Federal Republic of Germany also suggest that the trend towards grammar school education will continue: whereas in 1979 38 per cent of respondents wished their children to complete school with the Abitur (qualification for university entrance), in 1985 the number had already risen to 54 per cent. Admittedly it is unlikely that the number of those with university entrance level qualifications (29.5 per cent of 18-year olds in 1986) will rise to keep pace with the increase in parental educational aspirations. But the excess in capacity of the institutions of upper secondary education owing to the demographic decline will make it more possible for these parental wishes to be realized in the future. This reflects a fundamental change in the possibilities for educational policy and planning for a supply-side regulation of educational demand, as was partially practised in the past expansionary phase. With the available capacity and sinking pupil numbers this strategy is increasingly less effective and demand-side factors, which are more difficult to forecast and for planners to anticipate, assume increasing significance for educational participation.

Differentiated projections of educational participation in the post-compulsory educational sector are extremely difficult because of the large number of options at this level of the educational system and additional competition from the employment system. In the total perspective, a further rise in participation rates is generally expected, which, however, will probably vary from country to country - depending on the supply structure and the participation rate already attained. If this expectation is confirmed, then we may assume that structural shifts will accompany the rise in participation. In a number of countries the trend towards technical and vocational courses will probably persist. In other countries such as, for example, the Federal Republic of Germany, which already has a highly developed vocational education sector (with high participation), there could on the other hand be a further growth of the general education branches (which is confirmed by the parent surveys mentioned above). Capacity bottlenecks will in future have little regulatory effect on participation, at least in those countries which are more strongly affected by the demographic decline[4]. The gap between global supply capacity and total demand will increasingly widen. Competition between the various educational and training alternatives available will increase, and when it comes to taking up options individual educational wishes will gain priority.

These wishes depend - as the past has shown - to a considerable degree on developments in the labor market and the employment system. High youth unemployment is one reason why many young people remain longer in the educational system. Efforts to acquire advantages in the competition for scarce jobs by accumulating training and qualifications have reinforced this trend. With the improvement in labor market conditions expected in the coming decade as a result of demographic developments and the relatively favorable economic perspectives in most European market economy countries, these motives will recede increasingly into the background. The shortage of labor supply forecast for the middle- and long-term in a large number of countries will probably motivate people to transfer more swiftly from the educational to the employment system, i.e., the labor market entry age might possibly drop again.

The relatively "peaceful" development in the number of 5-14-year- olds until the end of the century must not be allowed to obscure the fact that the educational systems in a number of countries will have to cope with the consequences of the strong drop in birth rate, which will not make itself completely felt in upper secondary and tertiary education until the 1990s. It is also clear that it is only with a considerable time-lag that the phase of demographic contraction, which started around the mid-1970s, instigated or will instigate processes of adaptation planned and managed by educational policy. Educational policy has found it remarkably difficult to adapt to the changed demographic context. As Coombs (1983, p. 13) also comments: the demographic decline gave the educational systems "a much needed chance to catch their breath and shift the focus from quantative expansion to qualitative improvement. Yet, paradoxically, it seems more difficult to cope with the new problems and controversies arising from enrollment stagnation than with those that arose from earlier great expansion." The fact that the demographically determined decline in pupil numbers in some cases led to conspicuous qualitative improvements in the educational system (e.g., lower pupil-teacher ratios) and that some of the negative side-effects of the educational expansion of the 1970s vanished, has obviously contributed to the widespread opinion that the educational system will adapt automatically, so to speak, to the demographic decline and needs no policy intervention. This overlooks the fact that the decline in pupil numbers does not have just positive effects, but also a number of negative implications, which call for educational policy-makers to take action. The decline in births has had the effect of calling into question many of the traditional structures, concepts, norms and principles which originated in the period of educational expansion. Questions concerning the maintenance of a differentiated educational infrastructure (especially in rural areas), school organization, school and class sizes, of differentiation in curricula and teaching, of school location planning, of student transportation, of teacher mobility and development, etc., all demand

new solutions in a period of contraction (see also Lewin 1987). A process of unplanned adaptation will at best reach such solutions by chance; more probable are undesirable developments with severe negative consequences for the educational system. Constructive responses to the problems arising from shrinking educational systems and the avoidance of undesirable developments require that educational policy and planning become more closely involved in the management of this process of adaptation than has been the case so far.

Effects of population developments on the educational system derive not just from the absolute decline, but also from shifts in the age structure. The implications of the aging labor force for further education and training are obvious. In the coming decades, progressive economic structural changes (further shift in the economic structure in favor of the service industries) and the application of new technologies in the workplace will no longer be borne primarily by the new labor force entrants as in the past: with fewer young people entering the system, it is above all middle-aged and older workers who will have to deal with these changes. This will result in a considerable demand for retraining and upskilling, which will in turn lead to a large expansion in demand for further training. This trend will be reinforced still further by the presumably faster obsolescence of knowledge and skills due to accelerated technological change. The demand for further education and training arising from structural change and "human capital obsolescence" will meet with a greater willingness to enter further education and training by gainfully employed persons with a more profound basic education. For this reason, in many European countries further education and training will probably be the only growing educational sector. This will mean demands both on the formal (state) educational system - necessary adaptations particularly of institutions of higher education - and also on in-firm further training. Not only will the increase in demand for further training stimulate an expansion of educational services, but also non-work-related demand for adult education in the wake of increasing leisure, further reductions in working hours and an extension of length of retirement.

In addition to the direct implications of the population developments for the educational systems of the European market economy countries, we must consider the possible indirect effects. Such effects may result from the impact of the projected demographic changes on level and structure of social expenditures (education, health care, pensions, unemployment compensation, family benefits) and on the capacity to finance the various social programs. According to OECD calculations (1988a), the increase in total social expenditures up to 2040 *resulting from the demographic effect* will be very modest in most European countries. This surprising result is based on the medium fertility variant

projections and on the assumption that expenditures on the various social programs are only determined by demographically caused changes in demand for the various social programs and that the real per capita benefits of these programs, the labor force participation rate and the unemployment rate will all remain constant at 1980 levels. As a consequence of the demographic changes the proportion of the social budget spent on education is projected to decline in most countries (on average by about 30 per cent in the period 1980-2040, ranging from 15 per cent in the United Kingdom to 47 per cent in the Federal Republic of Germany), whereas the proportion of expenditures spent on pensions is projected to rise by about a third (ranging from 23 per cent in Sweden to 72 per cent in France), that is, there will be a substantial shift in the structure of social expenditure from (less expensive) programs serving the young to (more expensive) programs serving the elderly.

With increasing social expenditure and a simultaneous decline in the working-age population, there will however, be a significant increase in the financing burden of this group which will necessitate political intervention. This will be all the more the case as the assumption underlying the OECD calculations that increases in health care and pension expenditures will be offset by proportional reductions in education expenditures in line with the demographic decline is highly unrealistic. For neither do educational expenditures depend on the demographic developments alone, nor can it be assumed that real per capita expenditures will remain constant. We must assume that against a background of presumably generally increasing educational participation the trend towards "better-quality" (more expensive) educational courses will persist, that a substantial demand for expansion will develop in the further education sector and that because of political, legal, organizational and procedural constraints the "downward flexibility" of educational expenditure will be low (Weiss/Weishaupt 1989). This is reflected in rising unit costs. In the Federal Republic of Germany, for example, total recurrent expenditure per pupil increased by about 12 per cent between 1975 and 1983, parallel to a decline in the school population (general schools) of about 20 per cent (see also UNESCO 1988). It is basically reductions in the pupil-teacher ratio which are responsible for this development. In the long term staff levels could of course be adapted to the lower enrollment levels; but in view of further increasing demands on the quality of education (see OECD 1989c), it will probably be extremely difficult to reverse the standard of teacher provision once attained.

From the point of view of the educational sector, the low downward flexibility of educational expenditures is an effective "buffering factor", which - seen in global terms - should protect the educational systems from substantial budget cuts in the future, despite

increasing pressure on the sectors with shrinking populations. This does not exclude the possibility of bottlenecks and under-funding in certain sectors, for it has become evident that (equally intractable) restrictions also affect the process of internal allocation of resources, hindering redistributions of funds which are becoming especially necessary in the educational sector owing to the changing structure of needs and demand. The constraints which reduce flexibility of expenditure and possibilities for redistribution thus prove quite ambivalent. The consequences of restrictive inter- and intra-sectoral reallocation possibilities are higher social expenditures and thus a higher financial burdening of the labor force. To relieve this situation and to improve the capacity to finance social programs a number of proposals are under discussion (for details, see OECD 1988a, Chapter III). They range from increases in the labor supply (by increasing the labor force participation rate of women, postponing retirement age, encouraging immigration of foreign workers and reducing unemployment) to deliberately increasing work productivity and adjustments of health care and pension systems (see also Chapter III). Also under consideration are partial privatization of costs and strengthening the role of private suppliers, a strategy which could also become of increasing relevance in the future in the educational sector.

NOTES

1. Sum of age-specific fertility rates over all ages of the child-bearing period.

2.This assessment refers to the European region as a whole and is not necessary representative for all countries. The Federal Republic of Germany, for example, is experiencing a significant influx of Germans from the Eastern and Southeast European states wishing to resettle. Between 1984 and 1988 almost 400,000 people migrated from these states to the Federal Republic. The total number of people of German ethnic origin living in East Europe is estimated at 3.5 million. If they were all to immigrate to West Germany, this would check the decline in the German population (in the year 2000 the population would be around 5 per cent larger than without these immigrants) and would have a positive effect on the age structure, since the average age of the resettlers is much lower than that of the West Germans.

3. In the Federal Republic of Germany in 1985, for example, the net reproduction rate of foreign women was only 20 per cent higher than that of German women; in 1975 it had been as high as 85 per cent. These figures also include Turkish women, whose fertility rate - despite a continual decline - is still much higher than that of German women.

4. A hypothetical example applying to the Federal Republic of Germany will make this clearer: if in future the same number of people were to continue to be trained in the "dual system", after 1990 the total number of an age-group could participate in dual education. Even if the supply of training places were to sink by 1990 to the level of the beginning of the 1970s, three quarters of an age-group could still complete training in the dual system.

II. SOCIAL AND CULTURAL CONTEXT

A. Change in Values

In most Western industrialized nations there has for quite a long time been evidence of a change - of different intensity and form - in general awareness of social and cultural values (see de Jouvenel 1986). "Value change" means, in general terms, that ideas about what values are considered important, less important or unimportant are changing, i.e., that the hierarchy of values is being redefined. Social and cultural values are of vital importance for the functioning of societies because they offer systems for interpreting life and the world: as such, they both define desired behavioral patterns and fundamentally influence actual behavior. However, it is necessary to bear in mind that for values to have a real effect on society, they must be transformed via institutions, norms, role expectations and sanctions into individual values, attitudes and behavioral impulses. Proclaiming new values has little effect in itself.

It has become increasingly clear that the process of value change represents neither a short-term change of attitude, nor a passing fashion, nor a transitional phenomenon. Nor is it confined exclusively to members of younger age groups. The discarding of certain attitudes to life in favor of new ones is a basic fact of human existence. Today, however, this process is taking place at an unprecedented speed. The value change, as it manifests itself today, has transformed many fundamental convictions, opinions and orientations and created a new attitude towards life all within a relatively short time. It is a typical phenomenon of highly developed industrial societies and would be inconceivable without the powerful influences of technological progress, mass affluence, the social security system, the revolutionary developments in the mass media, mass education and educational reform.

B. Value Change in the Federal Republic of Germany - An Example

The Federal Republic of Germany is at the very top of the league of Western industrialized nations undergoing vigorous economic and societal development. At the same time, the process of value change is relatively advanced in this country, being particularly well documented for the areas of technology, profession and work, family and marriage, education, religion and church, and politics. Because of its paradigmatic character, the Fede-

ral Republic of Germany can serve as a useful example for presenting and assessing fundamental trends in value change.

(1) Acceptancy of Technology

The acceptancy of technology and science in the Federal Republic of Germany has changed conspicuously. People's belief in progress has crumbled, their awareness of living in a "risk society" has grown. In 1981 only 30 per cent of the West German population were still of the opinion that "on the whole technology represents a blessing for mankind" - as opposed to 72 per cent in 1966 (Noelle-Neumann/Strümpel 1984). In other Western industrialized nations, especially in the United States and Great Britain, there is a more positive climate of opinion with regard to scientific and technological progress. However, there can be no question of the West German population being generally hostile towards technology. It is mainly the large-scale technologies, such as nuclear power, which arouse scepticism and mistrust. In contrast to large-scale technology, the technology which the individual directly experiences in his day-to-day life is usually judged in positive terms. Experts take the view that the general attitude to science and technology of the populations of the advanced industrial countries is ambivalent (see Jaufmann/Kistler 1988, p.24).

(2) The Professional and Work World

In the area of the professional and work world, a number of demoscopic surveys and empirical studies indicate a diminishing work ethic, a decline in intrinsic work motivation, and a secular, more distanced attitude on the part of the working population towards their work - with the exception of professions with higher status. In the findings of the Internationale Werte-Studie (International Value Study) of 1981/82, which asked among other things "Are you proud of your job, your profession?", the Federal Republic of Germany came at the lower end of the scale. The number of those respondents who stated that they were "very proud" of their job was 84 per cent in the USA, 79 per cent in Great Britain, 42 per cent in Spain, 30 per cent in Belgium, 29 per cent in Italy, 19 per cent in the Netherlands, 15 per cent in West Germany and 13 per cent in France (Noelle-Neumann 1983).

Recent in-depth studies show a more differentiated picture of the attitude of the population of West Germany to their work and profession. The "classical" puritan work virtues are becoming less relevant. They are increasingly yielding to new communicative virtues. "Quality of life" is becoming important as the new system of reference in the work world. Expectations of work are increasing. Work should be interesting and responsible. Em-

ployees want to be kept better informed and to participate in planning and shaping their work. Flexible and shorter working hours are desired. A low value is put on work which is hard, physically demanding, unhealthy and alienated, and merely entails carrying out orders. In contrast, work which is mentally demanding, socially prestigious and regarded as meaningful is esteemed, even when it is tiring (Hondrich 1988).

People are becoming increasingly aware that employees in a highly technical and democratic civilization need skills which go beyond their professional qualifications in the narrower sense and that the traditional work virtues are no longer adequate. These skills, which are subsumed under the wider term of "social competence", include individual initiative, self-confidence, social sensitivity, flexibility, a sense of individual responsibility, the ability to work in a team, the ability to cope with conflict situations.

(3) Family and Marriage

The secular process of individuálization, rationalization and economization of life in industrial society has had a lasting impact in the Federal Republic of Germany on attitudes towards the family and marriage and generative behavior and has led to radical reevaluations. Such things as choosing a partner, getting married, deciding whether or not to have children depend "to a degree inconceivable in the past ... on individual behavior based on one's own personal choice and accountable to no-one else" (Klages 1988). Experiences and views on family and marriage have become highly differentiated and have led to a new kind of diversification into many forms of family and living patterns. The traditional family no longer represents the norm. It is only one variation amongst different ways of shaping one's existence. The modern pluralism of family-style forms of cohabitation includes unmarried couples living together, one-parent families, life as a single, LAT (living apart together), communes.

Marriage has lost its appeal, it has undergone "ideological devaluation" (Meulemann) - while at the same time the relationship to one's partner has received an emotional upgrading. The number of marriages has decreased, that of divorces has risen. The number of marriages dissolved per year more than doubled between 1960 and 1985. As a result of the increasing rate of divorce, the number of one-parent families is increasing.

This decline in marriage and increase in divorce are typical of many industrialized nations. Around 1970 the rate of marriage in most European countries was 7-8 marriages per 1,000 inhabitants (Federal Republic of Germany: 7.3). Around 1985 the rate of marriage dropped in the majority of countries to 5-6 (Federal Republic of Germany: 6.0).

In 1985 the lowest rates of marriage were recorded in Sweden and Spain (with 4.4 and 4.8 respectively). In 1985 the highest rates of divorce were to be found in Great Britain (3.0), Denmark (2.8), Sweden (2.4) and the Netherlands (2.4), followed by the Federal Republic of Germany (2.1). If the West German divorce figures were to remain unchanged in the future, over 30 per cent of all marriages would be divorced (Höhn and Schulz 1987).

The dwindling attractiveness of the institution of marriage contrasts in the Federal Republic with a spectacular increase in the number of unmarried couples living together. The number of people living in this sort of arrangement increased by almost five times between 1972 and 1985 (Höhn and Schulz 1987).

An important indicator for the fact that traditional forms of cohabitation have become less binding is the increasing number of single-person households. They rose from a fifth of all households in 1950 to a third in 1985. According to the number and proportion of types of household, the single-person household has meanwhile come to exceed households with a complete family. Increasingly not only old people, particularly elderly women, but also young people live in single-person households. Compared internationally the Federal Republic of Germany has the highest proportion of single households. Belgium, the Netherlands, France and the United States come next (Höhn and Schulz 1987).

In addition to the pluralization of family-type modes of living, there have been significant changes in family structure. Households in which three or more generations live together have virtually disappeared.

The number of families with children is on the decline. Most children grow up as only children. In 1988 52 per cent of families with children had only one child in the household. Only 13 per cent of families had three and more children (Sozialpolitische Umschau - Socio-Political Survey 303/1989).

The increase in working women has created new demands in children's education and supervision and the housework in the home, which call for men to share more in these tasks. Since the mid-1970s the role of the man within the family has changed, so that marriage has become more of a partnership. The husband helps more in the household, takes a greater part in looking after the children, takes more joint decisions with his partner. Young men are also prepared to renounce a rapid career advance in favor of their partners. In general there are signs of a levelling of traditional family and gender roles (INFAS 1989).

(4) Parental Education

Parents' educational maxims have changed fundamentally since the 1960s. The educational goals of "obedience and subordination" have steadily lost their consensus, and the goals of "order and diligence" are also losing their relevance; in contrast the goals of "independence and free will" have come to be widely accepted. Educational attitudes have become more liberal, the freedom granted to children has increased, children are allowed greater influence within the family. In 1962 around 50 per cent of young people were educated "strictly" or "very strictly", by 1983 this had declined to only about 19 per cent. The higher the social class, the more liberal the educational attitudes. (Kmieciak 1976, Allerbeck/Hoag 1985).

(5) Religion and the Church

Religious and church ties have become considerably looser. In 1983 40 per cent of the population rejected church attendance on principle. Twenty years before it had been 15 per cent. The frequency of church attendance declined amongst Protestants and Catholics by half within twenty-five years. Between 1970 and 1987 the Lutheran Church lost 11 per cent, the Catholic Church 3 per cent of their members. This loss of members has remained constant. The dwindling interest in the churches is put down to the increase in societal individualization, the increasing general rejection of the binding nature of norms, the disillusionment with institutions and the decrease in the influence of the family when it comes to determining belief and passing it on to the children. Trends towards a religious pluralism are becoming evident, a continuing roving interest in religious questions seeks new paths outside the traditional church institutions and practices (sects, mysticism, esotericism, new-age movement). Religion and the Church become just one "special sphere" among others such as work and leisure.

(6) Politics

In politics too there is evidence of tendencies towards pluralization and a decline in the authority of the parties and unions. The number of potentially critical voters is on the increase, doubts as to the ability of the political parties, state and government to solve problems is also growing, the politicians are suffering losses of authority and reputation. According to findings of surveys, a third of the population do not feel that their personal political value system is represented by any of the traditional political parties. The voters demand greater political morality and that decision-making processes should become more transparent. A conspicuous indicator of the loss of authority of the political parties

is the growing number of floating voters; for every ten regular party voters there are now eight floating voters.

The "classical" political ideologies have on the whole lost their relevance as central authorities of orientation. The party structure is changing, the multiple party system which had long been considered obsolete is being revived. The prevailing system of parliamentary majority democracy is being confronted by competing grass-root democratic alternative concepts, and "do it yourself" is becoming the new political maxim for civil action groups, self-help groups and lobby groups.

C. Pluralization and Individualization

The various processes of value change in the different areas of life are based in particular on two fundamental tendencies which characterize the current state of societal development: the pluralization of life situations and the individualization of the courses of the lives of the individual members of society. The pluralization of life situations makes it increasingly difficult to describe society in terms of a unified concept of societal structure. It is no longer clear to what extent basic concepts such as job, family, social class still correspond to reality. A highly developed differentiation of life situations has evolved. The trend is towards a "multi-options society", i.e., a society divided into more and more fragments or part-groups with different expectations, wishes and attitudes.

Because of the individualization of life courses, the members of society have a large number of possibilities for shaping their lives. They can conform to traditional societal roles and identities, or they can reject or ignore them, without having to fear social sanctions. Individual biographies become less and less tied to preformed role patterns, become more open to individual determination and must be shaped and answered for by the subjects themselves. There are no longer stable orientation patterns which can be permanently relied upon. Emancipation from societal constraints, the opportunity for more individualism, for new life forms and perspectives can, admittedly, also have negative effects, leading to isolation and a loss of orientation and consensus.

D. Post-Materialism

The processes of social-cultural change are reinforced and accelerated by, on the one hand, the impetus of the highly developed industrial, consumer and welfare societies, on the other, by the social-critical thrust of the "new social movements" - protest, counterculture, ecology, anti-nuclear power, feminist and peace movements and a large number of citizens' initiatives.

"Social movements" are a historically familiar symptom of long-term processes of modernization and industrialization. With their alternative positions and their critique of civilization they stimulate the predominant "Zeitgeist" and the socio-cultural process. Their central themes are individual and collective emancipation and the protection of man, nature and culture from dangerous developments in industrial civilization. The "new social movements" are the creators of a new picture of the world with the aim of establishing a "post-materialist", "trans-industrial", "socio-ecological" society based on new principles such as "self-fulfilment", "self-determination","self-organization", "decentralization", "participation" and "solidarity" (see Capra and Spretnak 1984). In the form of "green parties" they intervene actively in politics - with remarkable success in the Federal Republic of Germany, in Great Britain and France.

According to the theory of value change developed by Ronald Inglehart (Inglehart 1977, 1989), the proliferation of post-materialist attitudes towards values is a result of the prosperity of industrial society. During the long period of affluence after the Second World War, the Western industrialized societies have largely managed to saturate material needs. The value of these needs has decreased, while the value put on non-material needs has risen. According to Inglehart, the value structures of the individual are largely determined by his socialization as a young person and remain relatively stable throughout adult life: thus the post-material values acquired in the affluent milieu will almost certainly be retained in later life. This leads to a continual process of value change, a "silent revolution", in the course of which younger generations with post-materialist values such as "self-actualization" and "quality of life" increase, taking over from the older generations with their materialist value priorities like "maintaining law and order" and "security" and bringing about a long-term stable establishment of post-materialist structural and behavioral patterns. Since the new value orientations are most prominent among younger groups with higher socio-economic status and political competence, they have a considerable influence on political objectives and political behavior.

According to Inglehart (1989) and the findings of the Zentrum für Europäische Umfrageanalysen und Studien (ZEUS - Center for European Survey Analyses and Studies - see Schmitt/Hofrichter 1989), since the beginning of the 1980s a continuous increase in post-materialism can be observed in Europe. The ZEUS data indicate that the proportion of post-materialists has almost doubled during the last decade - from about 10 per cent to about 17 per cent. Correspondingly, there has been a steady decline in materialist issue priorities. Today this group is nearly half the size it was in 1980 - having dropped from 40 per cent to 24 per cent. A majority of Europeans have mixed issue preferences. Their proportion is also steadily increasing. Four countries are at the fore: the Netherlands, the

Federal Republic of Germany, Denmark and Great Britain. In the Netherlands, post-materialists have outnumbered materialists since 1985. A similar development took place in West Germany. In Denmark and Great Britain the two groups are of about equal size (see table II/1).

TABLE II/1: Materialsm and Post-materialism (as percentages)

- Figures are average proportions of the three most recent Eurobarometer surveys -*

	B	DK	D	GR	E	F	I	IRL	L	NL	P	GB	EC
Post-materialsm	15	19	23	8	13	17	13	10	15	26	5	18	17
mixed	50	60	54	46	45	53	55	64	55	55	41	59	55
Materialism	27	18	17	39	37	28	29	27	22	14	45	19	24

*Eurobarometer 29 (spring 1988), EB 30 (autumn 1988), EB 31 (spring 1989)
Source: Schmitt/Hofrichter 1989, p. 13.

The development of post-materialism in Europe documented by these figures shows that two opposing societal fronts are emerging. One continues to accept the traditional goals and norms of industrial society, while the other is oriented towards post-materialist and socio-ecological, alternative principles. Between them there is a large middle ground occupied by numerous different hybrid forms. A transitional society which is typical for the present emerges - no longer the "old" society, but not yet the "new".

E. Aspects of Future Society

The societal situation which has developed through the impact of the socio-cultural change has been aptly described by Habermas (1985) as the "new complexity" ("Neue Unübersichtlichkeit"). As a consequence of this "new complexity", predictions as to the possible future course of societal development are marred by a high degree of risk. However, for the near future it is possible with a reasonable degree of plausibility to predict that there will be no interruption in the course of socio-cultural change. This is indicated by the current figures on the development of post-materialism in the Western European industrialized nations (see Inglehart 1989; Schmitt/Hofrichter 1989). There is no sign of the tendencies towards stagnation which sociologists thought they could diagnose some time ago.

In these circumstances one can assume that those forces working towards the establishment of a "multi-options society" will be reinforced and accelerated. The structural features of this society can be derived from numerous empirical data with regard to already perceptible changes in attitude and behavior in the populations of the advanced Western industrialized nations. The extremely differentiated and fragmented "multi-options society" is characterized by a highly developed pluralism of values and diversity of life styles and by the collage-like juxtaposition of a large number of social subsystems with normative structures which deviate from one another (v. Recum 1985, 1990).

The rapid alternation of highly different interests, needs, information, opinions and criteria influences thought and action. Arbitrariness, multivalency, ambiguity have become central cultural and social determinants. Self-fulfilment in one's job and leisure and moral and aesthetic demands are of prime importance. Differences and contrasts are eroded or dissolve altogether. Among other things this helps the acceptance of foreign citizens and, in conjunction with increased international mobility, reinforces the trend towards societal multi-culturalism. Many features of the multi-cultural society are identical to those of the "multi- options society". In the multi-cultural society, numerous different value orientations, life-styles, special courses coexist in the juxtaposition of greatly varying ethnic groups and nationalities. Admittedly, this is not "modern", for in it different historical eras exist side by side. "Modern" people often regard this lack of synchronicity as primitive or reactionary. It is probably one of the greatest obstacles in a multi-cultural society to tolerating and respecting the individual nature of foreign cultures.

The relationship between work and leisure will change in the future. Assuming that the 38-hour week is introduced, in 1990 leisure time will be longer than work time for the first time in the history of industrialized society. According to the prognoses of experts, industrial society will have changed into a "leisure-work society" by the year 2010. By that time, the annual leisure budget will have risen to 2,300 hours, while the number of work hours will have fallen to 1,660. Nevertheless, work will retain its value as an expression of meaningful human activity. It will survive - beyond the main "bread-winning" profession - in new forms, for example, in the form of voluntary work, social and cultural activities, and the production of goods and services for personal use. "The leisure-work society" is expected to create new opportunities for independent activity, which will stimulate achievement, creativity and the will to shape one's personal life. Experts also predict that as we take leave of the pure "working for gain" society new life goals will emerge, which will range from "living more actively and healthily" to "living more sociably" to "living more awarely" and will at the same time determine consumer behavior (BAT Freizeit-Forschungsinstitut - BAT Leisure Research Institute).

F. Youth and Value Change

The influence of the change in values in society as a whole on the development of values and world views among young people has not yet been subjected to systematic investigation. However, certain aspects of the findings of a large number of West German studies of youth do provide significant indications that the socialization of young people today is considerably influenced by the value change.

According to the SHELL study Jugend '81 (Youth '81) the majority of young people no longer have any faith in the large-scale designs for contemporary society, no matter from what ideological tradition they derive. Industrial civilization has lost its appeal for them and they distrust any form of authority.
It is primarily young people with a higher school education who tend to protest against the "conventional" life project. Their protest does not, however, take the form of a unified and cohesive opposition - indeed, it remains a moot point whether young people actually have a unified counter-cultural life project. If so, it is relatively seldom that it is consistently practised in real life. More commonly, isolated aspects of the conventional life design are selected and undermined.

The study by the SINUS-Institut, Die verunsicherte Generation (The Insecure Generation), draws particular attention to the symptom of "Angst" ("fear"). The study claims that this is the basic psychological impulse underlying the way in which the majority of the young people questioned in the survey perceive and deal with the major problems confronting them today. Two thirds of the persons questioned feel personally affected by the destruction of the environment, almost half by the arms race and the threat of war.

A little more than half of these young people said that they were "on the whole dissatisfied", and the other scant half "on the whole satisfied" with the political system in the Federal Republic. For the time being, it appears that the traditional patterns of participation in representative democracy have lost none of their relevance. But new forms of exercising political influence are seen as being no less legitimate than the "classical" forms of political participation. Those political organizations and groups which stand outside the mainstream of the established political structure, articulating political protest and forming the backbone of the "new social movements", find a high degree of support among the majority of young people.

Young people continue to ascribe to their work and profession an important significance in their life. However, a clear change is evident in the fact that in addition to the material orientations, post-material orientations are becoming increasingly visible. 50 per cent of the respondents consider a good salary important in their job, but 41 per cent do not consider this material aspect to be of prime importance. A third of the respondents are prepared to give up their career goals in favor of goals related to self-fulfilment. The ideal sort of work seems to be that which gives the individual the opportunity to put into practice his own social and political commitment.

A large number of young people experience the adult world as unwelcoming, cold and hostile. As the study Jugend ohne Zukunft? (Youth with no Future?) by Allerbeck and Hoag (1985) shows, many young people have little contact with adults apart from their own parents. They do not, however, count their parents as part of the adult world in general, but place them in a special category of their own. While the relationship of young people to adults in general is rather fraught, the relationship with their parents tends to be largely unproblematic: the majority of young people claim that they get on well with their mother and father. Conversely, while parents will hear nothing against their own children, they often show reservations and hostility towards young people in general. Both sides find themselves entrapped in a circle of mutual prejudice. Compared internationally, the consensus between the older and younger generations in moral, religious and political questions is evidently considerably smaller in the Federal Republic than in the other Western industrialized nations (Noelle-Neumann 1983).

G. The Educational System and Socio-Cultural Change

The socio-cultural change is confronting the educational system with radical changes and new challenges. Like value orientations and lifestyles, educational preferences have also become more differentiated. Families are better equipped with both material (income) and non-material (educational level) resources. This has also brought increased educational aspirations, greater awareness of quality, increased interest in educational issues and involvement of the parents ("pedagogization" of the family). Demands for more freedom of choice in the educational system have increased. The formal educational systems, especially the general education school system, are no longer expected to function as an "agent of society" as in the past, but as the "agent of the family" (see Coleman/Hoffer 1987). In addition, today's generation of parents, which has grown up in welfare state conditions and under the influence of changed value preferences, lays great stress upon post-material values such as self-determination and participation in decision-making and wishes to see these practised in the educational sector too. This attitude con-

flicts with conservative tendencies in some European countries to strengthen values education and to return to traditional values associated with the more homogeneous cultures of the past (see Cummings et al. 1988 pp 45-57).

The survival and reputation of the state educational system will in future depend considerably on whether it succeeds in responding to the differentiated educational wishes of the population by orienting its offers more intensively towards parents' and students' preferences. Unless this happens, there will probably be a substantial demand for private education. The state-bureaucratic organization of the educational system - which dominates in most countries - is widely believed to be incapable of responding adequately to the changed educational needs. Political measures recently introduced in some countries, especially in Great Britain, to reinforce the private education sector must be seen in the context of this "crisis in confidence in education" (Coombs) and the alleged lack of "responsiveness" of the state educational system. The expansion of the private education sector and the growing importance of the further education sector will lead to an increasing pluralism of learning locations.

Children and young people today grow up in families whose educational style has become more partner-like. The self-awareness of young people has changed. They demand to be taken seriously as individuals with their own rights. In the "multi-options society" a generation is growing up "which is less willing to accept things as they are, more open-minded and outspoken, and perhaps a good deal less conscientious" (Dencik 1989, p.35).The schools will have to respond to these demands for self-determination by giving more opportunities for self-determined learning and participation in shaping lessons. They will also have to respond to the pluralism of life conditions which prevails in families today by offering more individualized and differentiated methods, teaching aids and learning objectives. The changed family structures - increase in "one-parent" families and only children - calls for the school to be places of social encounter and common basic experiences to a greater degree than in the past. The high degree of division of labor in modern society, the removal of paid work from the household and the increasing tendency for both parents to be employed has led to an erosion of the "social capital" important for the education of children both inside and outside the family. By "social capital", James S. Coleman understands "the norms, the social networks, and the relationships between adults and children that are of value for the child's growing up" (Coleman 1987, p. 36). In the wake of the socio-cultural change this erosion has been intensified. By developing new concepts the school could make an important contribution towards stopping this process of attrition and accumulating new social capital (see Coleman 1987). A further important task consists of orienting the content of schooling to

the mediation of "social competence", the capability of assuming responsibility for one's self and others. Increasing social competence is, on the one hand, the precondition for the further development and mastery of technical civilization, on the other, an urgent necessity for a society which desires responsible citizens and democratic progress.

H. Multi-Cultural Societies and Education

Cultural pluralism is by no means a new phenomenon in Europe. The increase in political interest in this phenomenon and the recognition that education should respond to the situation is, however, relatively new. The main reason for this was the large waves of migration induced by the growing demand for labor in the economically prospering Western European nations in the 1950s and 1960s. It was particularly the "family migration", starting later, which had an impact on the educational systems of the "receiving countries" through a considerable increase in the proportion of foreign pupils in the schools (see table II/2). Educational policy - differing from country to country within the general context of immigration policy - responded with a number of measures, placing particular stress on improving the linguistic skills of the "new minorities" (for details, see OECD/CERI 1987). In spite of these measures, the disadvantage at school of immigrant children could not be reduced to the degree hoped for. They continue to be represented above average in special education and in the short streams or the less prestigious cycles of secondary education and to leave school more frequently without a certificate. Their risks on the labor market are correspondingly higher.

TABLE II/2: Foreign school enrollment rates in selected countries 1982/83 (as percentages)

Level of education	Belgium(a)	France	Germany(a)	Luxembourg	Netherland	Switzerland(a)
Pre-primary	13.0	9.8	17.5	37.0	5.9	20.1
Primary	13.5	10.1	11.9	38.0	4.8	18.0
Secondary	9.9	6.4	3.8	19.3	2.3	12.8

(a) = 1981/82

Source: OECD/CERI 1987, p. 19

Greater efforts are generally considered necessary in order to realize demands for inter- and multi-cultural education in school practice. Corresponding measures (e.g., the introduction of instruction in the native tongue) have already been introduced in a number of countries. This shows a fundamental change in the way of looking at and responding to multi-culturalism. In many countries the precondition for this was the recognition that

temporary migrants have become de facto permanent immigrants. The (educational) policies addressed to multi-culturalism vary considerably between the European market economy countries and are still in a state of change. It is therefore difficult to predict the direction which future developments will take. All that is certain is that because of the relatively large proportion of foreign population in the younger age groups and the continuing greater fertility of minority females, cultural and linguistic minorities will continue to represent a growing proportion of pupils in the schools (see for details OECD/CERI 1987). This will increase the pressure on educational policy-makers to take corresponding action. In the end, it is the general political climate which is decisive. The trends towards a more restrictive immigration policy over the last few years together with the hostility towards foreigners which has emerged partly in connection with the economic crisis give little ground for optimism. Most countries are still far removed from a broad acceptance of cultural diversity, a basic precondition for a society with "stable multi-culturalism" (Smolicz 1984).

In this context it is understandable that the realization of inter- and multi-cultural educational programs have - apart from some exceptions - only made very halting progress. The curricula continue to be mainly ethnocentrically oriented: "...most of the multicultural curricula offered in schools ...are targeted at the "others" and only concern pupils from the ethnic minority communities instead of the whole school population" (OECD/CERI 1989, p. 7). However, it must be kept in mind that "only when cultural maintenance for the minorities is combined with the opening up of their cultures to the children of the majority can we expect genuine cultural dialogue..." (Smolicz 1984, p. 20). The question is whether it is necessary to go beyond curricular adaptations and also to take measures affecting school organization, in order not just to mediate cultural differences in an abstract, cognitive way, but also to enable them to be experienced practically in a multicultural school context (see also OECD/CERI 1989, p. 64). There are, however, various obstacles to the practical realization of such considerations: ideological reservations, the growing demand for freedom of choice of school, ethnic and social selectivity of differentiated school systems and the sometimes strong ethnical and social segregation of urban residential areas with a high concentration of ethnic minorities at certain schools. In this respect, consideration should be given to the introduction of school concepts, which strive for ethnic and cultural integration on a voluntary basis, such as, for example, the magnet schools in the USA (see Weiss 1989).

III. THE ECONOMY AND HUMAN CAPITAL FORMATION

Education both needs resources and is itself a resource. Education is thus doubly linked with the economic context: as a resource-consuming system, education competes with other activities for resources; as an investment in human capital, education is at the same time a crucial and, hopefully, a strategic factor for welfare and growth. Economic growth (A.) is to a substantial degree generated by the labor force (B.), at least in as much as there is employment (C.) for this labor force. To match supply (labor force) and demand (employment opportunities), structural change in the economy (D.) and human capital formation in society (E.) must be taken into account. This chapter therefore deals with the given and expected linkages between the economic context of education and education itself.

A. Economic Growth

European market economies have gone through three distinct phases of growth during the four decades since the end of World War II: a long period of growth up until the first oil crisis in 1973; a period of stagnation from the mid-1970s until the mid-1980s; and finally a phase with good opportunities for growth, but also calling for adjustments prompted among other things by the Single European Act of 1987, which sets forth the perspectives for the completion of the internal European market and the establishment of an economic and financial union. The great possibilities, but also uncertainties of international politics, on the one hand, the radical changes in economic structures and technological processes, on the other, promise further transformations in the European market economies in the coming years.

(1) Growth: trends and projections

From the late 1940s until the early 1970s, post-war reconstruction and liberalization of world trade enabled most European market economies to ensure full employment and to achieve an average annual growth rate of almost 5 per cent (gross domestic product/GDP). Between 1965 and 1973, the GDP in European market economies was still growing at an annual rate of 4.3 per cent and the unemployment rate was only 2.3 per cent. But in this period, the world gross product was already growing by 5.3 per cent per annum - carried primarily by the 6.9 per cent growth of the oil-exporting economies, the 7.1 per cent growth of the centrally planned economies and the 8.6 per cent growth of the other developed economies (see table III/1).

TABLE III/1: Production growth rates world-wide and by regions: base-line scenario

	Past values				Projections		
	1965-1973	1974-1980	1981-1985	1974-1985	1986-1990	1991-2000	1986-2000
World product	5.3	3.2	2.7	3.0	3.0	3.2	3.1
Real GDP/NMP							
North America	3.8	2.3	2.4	2.3	2.5	2.6	2.6
European market economies	4.3	2.6	1.3	2.0	2.4	2.5	2.5
Centrally planned econemies	7.1	4.6	3.1	4.0	3.9	4.0	4.0
Other developed economies	8.6	3.5	3.3	3.4	3.6	3.8	3.7
Oil-exporting economies	6.9	4.1	-0.2	2.3	2.5	3.0	2.8
Oil-importing economies	6.0	5.4	2.3	4.1	4.0	4.1	4.1

Source: ECE secretariat data base and base-line projections (UN/ECE, p. 5)

In 1973/74, the quadrupling of oil prices marked the end of the "golden age" of high and relatively stable post-war growth for the European market economies. This was followed by a severe recession in 1974/75 and by a series of sharp increases in some other raw material prices. Since the European market economies are highly dependent on these raw materials, the rise in the relative prices for oil, other fuels and raw materials affected the competitiveness of European products and led to a number of adaptations and structural changes in order to combat the deterioration of economic performance.

What followed was a period of slow growth, too slow in many European countries to absorb the steadily growing labor force. The annual GDP growth rate in European market economies was 2 per cent during the period 1974-1985 and 2.4 per cent during the period 1986-1990, which is only half as high as in the period before the oil crisis. At the same time, the unemployment rate rose to 3.2 per cent in 1974-1985 and reached 11 per cent during 1986-1990.

Since the beginning of the 1970s, this deterioration of economic performance has been accompanied by a discussion which may be seen as the economic variant of the value change described above: the economic affluence of today's generations cannot be allowed to increase indiscriminately, if this impairs or even destroys the living conditions or even the survival of future generations (see, for example, Club of Rome 1972; Council on Environmental Quality 1980). This postulate found a particularly strong echo in the European market economies, as the detrimental effect on the environment of their production processes and end products is relatively strong.

High rates of growth are therefore no longer unreservedly accepted and pursued as the supreme economic objective. The costs and limits of growth are critically examined:

growth is no longer regarded just as a quantity, but more stress is placed on its quality. This may be one reason why for the period 1986-2000 the "Economic Commission for Europe (ECE)" predicts a moderate annual growth rate for world domestic products of 3.1 per cent (base line scenario) or 4.1 per cent (higher growth/ optimistic scenario) (United Nations 1988, p.9, table 1.1). According to their assumptions (base line scenario), the strongest economic growth impulses will come from the developing oil-importing countries (4.1 per cent p.a.) and the centrally planned economy countries (4 per cent p.a.). The European market economy countries will have the lowest growth rate (2.5 per cent p.a.) of all six U.N. economic regions (see table III/1). This may well also entail a rise in the unemployment rate of over 12 per cent (in 1990) to almost 13 per cent (in the year 2000).

A higher growth rate of 3.6 per cent p.a. is considered possible in the "higher growth/optimistic scenario", if the European market economy countries succeed in coping with the unemployment problem by means of structural adjustment through different patterns of investment and productivity, modifications in working arrangements and human capital formation. Furthermore, the growth prospects for the European market economies are determined by the scheduled realization of the EEC internal market and by the increasing global interrelationship of the national economies ("globalization").

(2) The potential of the EEC internal market

Great hopes are attached to the completion of the internal market of the twelve countries of the European Economic Community, which is expected through the free flow of goods, personnel, services and capital after 1992 to bring greater competition and thus an increase in growth and structural change. "The opening of nationally protected markets is intended to reduce existing monopoly rents, increase the pressure to exploit technological advances, create new opportunities for utilizing economies of scale and enable synergetic effects to be realised through inter-company cooperation. Greater efficiency is to ensure and improve growth and competitiveness" (Vogler-Ludwig 1989, p. 12).

The process of adjustment to the internal European market has already begun, for it is evident that the positive effects of the common market on growth and employment can only be achieved by means of an improvement in the qualifications and mobility of individuals. A number of preparatory adjustment processes in educational and vocational education policy have therefore already been introduced by the member countries and the EEC Commission. According to the Treaty of Rome, educational policy does not fall

within the jurisdiction of the Community institutions; however, the agreement of 9.2.1976 of the Council of Ministers and the Ministers of Education assembled in the Council initiated cooperation with an action program in the educational sector. The "Guidelines of the EEC Council of 21.12.1988 on a general regulation for the mutual recognition of higher education diplomas awarded on completion of professional education and training of at least three years' duration" were an important step towards reducing barriers to mobility. Further initiatives for mutual recognition of vocational training and professional qualifications were announced by the EEC Commission in 1988 in their working paper "The social dimension of the internal market."

A fundamental obstacle to mobility is the inadequate language skills in the EEC. In a survey, two thirds of EEC citizens said that they did not speak any foreign language "well enough to take part in a conversation". A quarter of EEC citizens speaks one, 8 per cent speak two foreign languages. Against this background the EEC Ministers of Education endorsed the LINGUA program with the aim of supporting measures by member states to improve language skills. The program has a duration of five years (1990-1994) and a budget of 200 million Ecu (about 240 million dollars). Subsidies are given for the further training of language teachers, language instruction at universities, but also in firms and vocational schools, and the exchange of trainees within the Community. The "ERASMUS" program in the university sector and the program "Youth for Europe" for the intensification of youth exchanges in the EEC also aim at an improvement in mobility. The COMETT program serves to support the cooperation of universities and firms in the area of training in the field of technology.

According to the simulated calculations of the effects of the common market submitted by the EEC Commission (CECCHINI Report), the implementation of the measures for reducing market segmentation put forward in the EEC White Paper would lead in the course of a six-year transitional phase to an increase in growth of 4.5 per cent and an increase in employment of 1.8 million (= 1.5 per cent of the current EEC labor force of around 126 million). The effect on employment would be more than three times as high, if additional fiscal policy measures were taken (increase in state investment, reduction of direct taxes); this could bring an increase in the growth rate of the EEC gross product of as much as 7.5 per cent[1)].

(3) Global strategies for growth and development

The common European internal market may also have growth potential for non-EEC European and non-European countries, since the EEC sees itself as just one of many

initiatives aiming at a more balanced division of labor and distribution of wealth on a world-wide scale. For this reason, international trade and cooperation in the future may become an even more powerful source of pressure for structural change and growth for the European market economies than in the past. Three developments appear particularly important: how far and how effectively

- the Western, and especially the European market economies intensify their efforts in co-operating with developing countries towards sustainable and equitable development (OECD 1989f);
- the developing, and especially the Newly Industrializing countries (NICs) participate in a more intensive world economic division of labor;
- the centrally planned economies open up to trade and cooperation with the European market economies.

It is as yet impossible to assess the effects on economic growth and employment of the political changes in Eastern Europe. Exchange rate support and investment and infrastructure assistance will certainly also lead to closer economic relations. "Joint ventures" between Western and Eastern European companies, agreements of cooperation between countries or outline treaties with the EEC or EFTA could become much commoner instruments and bring increased growth for both the European market economies and the European planned economies.

B. Labor Force

If capital stock and technology are taken as given, the labor force becomes the crucial factor for overall economic performance, and it is the labor force which, to a greater or lesser degree, links the economy and education.

(1) Labor Force: trends and projections

The potential labor force of a country or of a region is determined by the working-age population (15- to 64-year-olds) and the labor force participation rates of the individual population groups. As a whole, the potential labor force in the European market economies has not risen greatly in the past ten to fifteen years, although there have been shifts in population structure and some deviating developments in some countries. In very general terms, the participation rates of younger people (15-24) and of older males (55-64) decreased owing to longer periods of vocational training and earlier retirement respectively. In contrast, the participation rates of the female working-age population rose markedly. The effect this had can be illustrated by a calculation for Europe-9:

whereas the working age population in Europe-9 only rose between 1975 and 1985 by 8.8 million, the labor force increased in the same period by 13 million to 117.9 million[2)].

There are also striking differences in the participation rates from country to country. In 1987 around 270 million people of working age were living in European market economies; the total labor force for all 19 countries was about 177 million people, which corresponds to a labor force participation rate of 65.7 per cent (see Appendix 2). The Scandinavian countries had a clearly above-average labor force participation rate (Sweden: 81.7 per cent); with the exception of Portugal, the Southern European countries lay below the average (Spain: 57.7 per cent). The reason for these differences is also primarily the differing participation rates of women in the various countries: in the Scandinavian countries, their participation rate lies at between 72.3 per cent (Norway) and 79.4 per cent (Sweden), but in Southern Europe at only between 37.5 per cent (Spain) and 57.4 per cent (Portugal).

The EEC bases its projection of the future labor force on a constant total labor force participation rate for the European market economies (Western and Southern Europe only, Scandinavian countries excluded): while it is assumed that there will be a conspicuous increase in female employment, this will be compensated by lower participation rates amongst 15- to 24-year-old males (and, to some extent, females) and males of 55 years and above (United Nations 1988, pp. 212, 208). The annual increase in the labor force will therefore only be 1,059 million people in 1990-2000 (mean assumption).

Assuming participation rates at the 1985 level, the EEC arrives at an even more cautious projection of the labor force of Europe-12 in 1985-2025: according to this, the labor force in Europe-12 will at first increase slightly from 140.5 million (1985) to 146.9 million (2000), but will then decrease to 131.7 million (2025), whereby the German labor force alone might decrease between 1985 and 2025 by 7.5 million (Eurostat 1988, p. 20).

The OECD also expects that the growth in labor force will decelerate: the average annual growth rate for the OECD countries, which was 0.7 per cent for the period 1973 to 1986, may fall to 0.3 per cent between 1986 and 1990 and 0.1 per cent between 1990 and 1995. "While most European countries are likely to see a deceleration of total labor force growth in the next decade (see table III/2), Germany is likely to be the only Member country to experience a decrease in its total labor force. By contrast, in France, Ireland and Spain, the total labor force is likely to continue growing without deceleration" (OECD 1987a, pp. 54-56).

TABLE III/2: Total labor force projections for selected European market economies (Average annual growth rates)

	Age groups	Total				Males				Females			
		Historical trends		Projections		Historical trends		Projections		Historical trends		Projections	
		1973-79	1979-87	1987-90	1990-2000	1973-79	1979-87	1987-90	1990-2000	1973-79	1979-87	1987-90	1990-2000
Austria[a]	15-24	1.5	-0.0	-3.1	-2.6	1.2	-0.2	-3.0	-2.6	1.9	0.2	-3.1	-2.7
	25-54	0.6	0.8	1.7	0.7	0.4	0.4	1.3	0.3	0.8	1.5	2.4	1.1
	55-64	-0.4	-2.9	-3.6	1.4	-1.4	-1.5	-3.3	1.4	1.3	-5.4	-4.3	1.5
	Total[b]	0.6	0.3	0.3	0.1	0.3	0.0	0.0	-0.1	1.1	0.6	0.7	0.4
Finland	15-24	-2.1	-1.2	-4.6	-0.7	-2.3	-1.4	-4.7	-0.6	-1.7	-0.9	-4.3	-0.7
	25-54	2.1	1.4	1.1	0.1	1.8	1.1	1.0	-0.1	2.4	1.7	1.2	0.2
	55-64	-2.5	0.0	-0.2	1.9	-3.4	0.1	1.6	1.7	-1.5	-0.1	-2.2	2.1
	Total[b]	0.5	0.7	0.1	0.1	0.1	0.5	0.1	-0.0	1.0	1.0	0.0	0.2
France	15-24	-1.2	-1.3	-0.5	-2.0	-1.7	-1.2	-0.3	-2.0	-0.5	-1.4	-0.8	-2.0
	25-54	1.7	1.6	1.8	1.1	0.7	0.8	0.9	0.7	3.3	2.6	2.9	1.6
	55-64	0.6	-0.8	-2.1	-1.5	0.3	-1.7	-1.9	-1.4	1.0	0.6	-2.3	-1.5
	Total[b]	0.8	0.7	1.1	0.5	0.1	0.1	0.5	0.2	2.0	1.6	1.8	0.9
Netherlands	15-24	-1.3	0.4	-0.4	-3.2	-2.0	0.2	-0.4	-3.4	-0.5	0.6	-0.5	-3.0
	25-54	2.5	2.5	2.9	1.4	1.4	1.3	1.7	0.9	6.3	5.5	5.1	2.2
	55-64	-1.2	-4.5	0.2	3.8	-1.6	-4.7	0.6	3.4	0.7	-3.6	-0.9	5.4
	Total[b]	1.1	1.4	2.0	0.8	0.3	0.5	1.2	0.6	3.1	3.4	3.4	1.3
Norway	16-24	2.0	3.4	0.8	-1.6	1.4	3.8	0.4	-1.6	2.7	2.9	1.2	-1.5
	25-54	2.4	2.2	2.0	1.2	1.1	1.2	1.6	0.9	4.5	3.5	2.6	1.4
	55-64	1.9	-1.6	-2.2	1.7	0.7	-2.3	-3.1	1.3	3.9	-0.5	-1.0	2.3
	Total[b]	2.2	1.6	2.1	0.7	1.1	0.9	1.6	0.4	4.0	2.7	2.7	1.0
Sweden	16-24	1.0	0.1	-1.4	-1.8	0.3	-0.1	-1.5	-1.8	1.8	0.4	-1.4	-1.8
	25-54	1.7	1.1	1.3	0.4	0.6	0.4	1.1	0.2	3.1	1.9	1.6	0.6
	55-64	0.7	-0.8	-1.0	2.4	-0.7	-2.1	-1.3	2.1	2.9	0.8	-0.7	2.6
	Total[b]	1.4	0.7	0.6	0.4	0.3	-0.0	0.4	0.2	2.8	1.5	0.8	0.6
United Kingdom[c]	16-24	2.6	1.2	-2.6	-1.8	2.0	1.1	-2.5	-2.0	3.4	1.2	-2.6	-1.6
	25-54	0.6	1.0	1.8	0.8	0.1	0.4	1.4	0.5	1.3	1.8	2.3	1.1
	55-64	-0.8	-2.5	-0.4	0.4	-1.0	-2.8	-0.8	0.3	-0.4	-1.9	0.3	0.7
	Total[b]	0.6	0.5	0.5	0.2	0.1	0.0	0.1	-0.0	1.4	1.2	0.9	0.5

a) The data presented were calculated over the following time periods: 1973-79, 1979-85, 1985-90, 1990-2000.

b) The total labor force is defined as the labor force for all ages over 15 (16) (except in Sweden where until 1986 there was an upper age limit of 74; after 1986 the upper age limit was lowered to 64).

c) The United Kingdom provided labor force participation rate projections only up to 1995. The participation rate projections for the period 1995-2000 were estimated by the Secretariat using simple extrapolation techniques and were then combined with the population projections provided by the United Kingdom to obtain the above labor force projections.

Source: OECD Employment Outlook 1988, p. 38

(2) Labor force participation

We must of course take into consideration that these projections of labor supply are based on the extrapolation of past trends. They do not take into account the fact that an increase in economic activity may influence the participation rates of certain groups of the population and that the attitude towards working may change. In addition, various arguments suggest political intervention in order to increase the labor force participation of certain groups, thereby improving (a) the possibilities for structural change and growth and (b) the financial conditions for health and social security systems. Moreover, this is in line with the social and political objectives of recognizing the demand for participation in economic and social life and assisting individuals to perform a useful role in a more "active" society. If the European market economies wish to increase their labor force, the scope for labor market and educational policy measures must be fully explored and used. In this connection, particular attention must be paid to four groups of the population: discouraged workers, young persons, females, older workers.

Discouraged workers

On the periphery of the labor force there are many participants who are available to take up work, but who have become discouraged: they neither actively search for a job nor even register as unemployed, because they do not believe they would succeed in finding work, be it for personal or job-market reasons. Concepts such as "hidden unemployment", "marginal activity" or "discouraged workers" try to take account of this part of the non-participating working-age population as a part of the currently available labor supply - in contrast to traditional labor force statistics. The "hidden unemployment" seems to be rather sensitive to cyclical changes in the economy, and women are clearly more affected than men[3]. This necessitates urgent labor market and educational policy measures; possible approaches are discussed in the sections below on "patterns of female participation" and "long-term unemployment".

Young persons' education and labor market activity

Owing to aspirations towards higher educational qualifications and the necessarily longer periods of education, an increasing number of 14 to 24-(29-)year-old young people are in school and higher education. Their labor force participation rate is therefore much lower than that of the 25 to 54-year-olds (in France: 42.5 per cent vs. 83.2 per cent; the Netherlands: 48.1 per cent vs. 69 per cent; Sweden: 66.4 per cent vs. 92.6 per cent - all in

1987), and a further decline is expected in the European market economies (OECD 1988b, p. 40).

Nevertheless, as an OECD labor force survey shows, many young people attending school or higher education institutions seek or hold jobs. The labor participation rate of teenagers (15 to 19-year-olds) ranges from 0.7 per cent (Belgium) to 5.5 per cent (Federal Republic of Germany), 45.1 per cent (United Kingdom) and 51.7 per cent (Denmark); for young adults (20 to 24-year-olds), the respective rates are 6.8 per cent, 12.2 per cent, 51.1 per cent and 54.7 per cent (OECD 1988b, p. 57).

For many young people, such combinations of school and work offer an opportunity to earn pocket money, to become less dependent on their parents and to develop their own path into the adult world. From the point of view of labor market policy, they represent a considerable labor force potential for part-time and temporary jobs; this also helps young people to acquire first work experience, which in turn helps to ease the transition from education to working life. In addition, this development fits into the trend in educational policy to enrich post-compulsory education by elements from the work world, in order to meet the demand for a much broader concept of human abilities than traditional education does. The discussion being conducted in many countries, e.g., in the Federal Republic of Germany, about reducing the length of secondary education, changing military and community service, and shortening the courses of study at university must also be seen in this context.

Patterns of female participation

More and more females have joined the labor force over the past two decades, and their labor force participation rate amounted to an average of 46 per cent in European market economies in 1987. The participation rate is about 40 per cent in Southern Europe (excluding Portugal); it is between 40 and 60 per cent in Central and Western Europe. With rates between 70 and 80 per cent, female participation is highest in the Scandinavian countries, obviously due to high provision and take-up of leave for family reasons and the spread of part-time employment in these countries (see table III/2).

An analysis of female participation over the life-cycle suggests "an evolution between three broad patterns of participation by age, as follows: one peak to the left, at ages 20-24; two peaks separated by a valley around age 30; and a broad plateau" (OECD 1988b, p.

134). The first pattern with one peak may be typical for traditional societies, where most women do not work after school or withdraw permanently from employment after marriage or child-bearing. The second pattern with two peaks and a valley is explained by a temporary withdrawal from the labor force around the age of 30 in order to look after young children in the family, with the second peak denoting "re-entry women" (e.g. United Kingdom). The third pattern with a broad plateau stands for successful combination of labor market and family activities without leaving the labor force (Denmark, Scandinavian countries).

It is an important question for both labor market and educational policy whether a society favors the second or third of these patterns. The "modern", third alternative will probably not prevail until the development evident in many societies towards "a changed role structure and distribution of formal work and housework between men and women" (Bach/Brinckmann, 1986, p. 361) has become established as the norm. Government programs and other related policy measures in the European market economies seem to aim primarily at supporting measures for vocational reintegration of women (second pattern). In this connection, the European Parliament has called for a careers advisory service for women with specially trained careers counsellors, the development of pilot programs by the Commission to train these counsellors, and advice and support for women who return to work after an interruption in the form of further training and especially courses for information and motivation (see Larive-Groenendaal 1987, especially pp. 13-21).

Older workers and retirement

Between 1960 and 1983/84, the average retirement age for males fell from 64.6 years to 61.3 years in Austria and from 65.2 years to 62 years in Germany; between 1975 and 1983/84, it decreased from 63.6 years to 62.4 years in France and from 69.1 years to 66 years in Portugal. Affected by long-term unemployment and early retirement programs, the labor force participation rate of older workers has declined substantially. There was a corresponding rise in the proportion of retired among the 55 to 59-year-olds not in the labor force: between 1981 and 1986 from 29.4 per cent to 35.5 per cent in the Federal Republic of Germany, from 36.2 per cent to 40.7 per cent in Portugal, and from 70.3 per cent to 84.8 per cent in Finland (OECD 1988b, pp. 66-68).

Regardless of whether retirement takes place as an administrative act, is accepted as a consequence of job destruction or is the individual's free decision, the retirement decision

means partial or even complete devaluation of human capital. But retired people have knowledge, skills and contacts which do not become obsolete from one day to the next. This and also the fact that in European market economies the number of active contributors to social security is continually declining, while the number of beneficiaries of pensions is increasing, suggests the necessity of greater flexibility and more options in the individual retirement process. "Successfully meeting this objective will require complementary social and economic changes, notably expanded training opportunities, improved flexibility in working-time arrangements, and changes in the valuation of the actual and potential contribution that the elderly - particularly the 'young elderly'- can and do make to society" (OECD 1988b, p. 9).

In addition to these four target groups for an active labor market and educational policy, there are also others, for example, the disabled or one-parent families. Furthermore: "No two individuals, occupations or regions being identical, meeting the needs of individuals should be the basic goal of any set of measures to improve employability" (OECD 1988b, p. 8). This is also necessary because otherwise there would be a potential pool from which above all the "underground economy" could recruit its labor force. This is undesirable in terms of both economic and social policy, because labor contracts, tax and social security payments would be avoided, enabling the expansion of the "second labor market" with underprivileged and unstable labor relations.

Here educational and vocational guidance services can intensify their key role "in fostering the efficiency in the allocation and use of human resources, and in fostering social equity in access to educational and vocational opportunities" (Watts 1988, p. 5), especially if it is possible to achieve at a local level the cooperation, coordination and integration of all information, counselling and job placement services. The "Watts Report" on behalf of the Commission of the European Communities on "Educational and Vocational Guidance Services" contains three key trends offering a perspective in this direction:

- "That educational and vocational guidance is increasingly being seen as a continuous process, which should start early in schools, should continue through the now often expected period of transition, and should then be accessible throughout adult and working life.

- That there is a move towards a more open professional model, in which the concept of an expert guidance specialist working with individual clients in what sometimes appears to be a psychological vacuum is supplemented by a more diffuse approach in which a more varied range of interventions is used, and in which more attention is given to working with and through networks of other individuals and agencies.

- That there is greater emphasis on the individual as an active agent, rather than as a passive recipient, within the guidance process" (Watts 1988, p. iii).

C. Employment

Economic growth throughout the first decade of the post-war period allowed the main policy goal of full employment to be achieved: in general terms, there was work for anyone who wanted employment. European market economies successfully eliminated mass poverty; at the same time, they developed programs of social protection: health, education, and old-age pension schemes were extended; welfare benefits supported those unable to earn an adequate income. "However, over the last decade or so several developments have weakened some of the underpinnings of what had been a strong, but simple, and in some areas inflexible, structure of full employment, social protection and economic growth" (OECD 1989d, p. 8).

(1) Employment and unemployment: trends and perspectives

In 1987, around 159 million of the 178 million labor force were employed in the 19 European market economies, 89 million of which were employed in Central and Western Europe, 58 million in Southern Europe and 12 million in the Scandinavian countries. Almost two thirds of those employed worked in the four major countries, the Federal Republic of Germany (26 million), the United Kingdom (25 million), Italy (23 million) and France (22 million) (see Appendix 2).

In contrast to other regions of the world the European market economies showed the lowest increase in employment during the last decade[4]. This trend was accompanied by continuing high unemployment. In 1987 around 19 million of the labor force of 178 million in the 19 European market economies were unemployed: 9.2 million in Southern Europe, 9 million in Central and Western Europe and 0.5 million in Scandinavia. The countries Spain, the United Kingdom, Turkey and Portugal, with about 3 million unemployed each, accounted for almost two thirds alone. The unemployment rate was 10.5 per cent of the labor force in the European market economies, with substantially lower rates in Scandinavia (Sweden 1.9 per cent, Norway 2.1 per cent) and higher rates in Southern Europe (Spain 20.5 per cent, Turkey 15.2 per cent).

(2) The challanges of unemployment

Unemployment in European market economies became a major problem for economic performance after the first, and even more after the second oil crisis (1973 and 1979)[5].

Specific unemployment problems arose because (a) in the past 15 years, members of the "baby boom" years have been seeking entry into the labor market, (b) the continuing unemployment led to a stronger increase in long-term unemployment, and (c) the significance of regional unemployment increased.

Youth unemployment

In 1987 the youth unemployment rate as a percentage of total youth labor force ranged from 4.2 per cent in Sweden to 38.9 per cent in Spain. In recent years it has declined considerably in Scandinavia, much more slowly in Central, Western and Southern Europe. This is partly a result of the easing of demographic pressures. But it is also a reflection of changes in the educational activities of youth and of a variety of employment and training schemes, which have been established by governments and local agencies to combat youth unemployment, e.g., "les travaux d'utilité collective" (TUCs) and "les stages d'initiation à la vie professionelle" (SIVPs) in France, the "Youth Training Scheme" (YTS) in the United Kingdom or the "Employment Promotion Programs" in Spain. The national policies in European market economy countries have been supported by programs of the EEC Commission, such as, for example, the initial funding of "Youth Initiatives".

Long-term unemployment

In 1986, of ten unemployed persons just under 7 in Belgium, just under 6 in the Netherlands and in Spain, about 5 in France, just over 4 in Ireland and the United Kingdom, and 3 in the Federal Republic of Germany were unemployed for over a year, and thus counted as "long-term unemployed". The proportion of long-term unemployed in total unemployment increased in all European market economies in the last decade. Male prime-age adults are particularly affected, which is probably due to the structural changes in traditional manufacturing industries. The proportion of younger workers has tended to fall, as has the rate of older workers, which may reflect the trend towards early retirement.

The financial burden and the social hardships faced by the long-term unemployed forced European market economies to develop a series of policy measures to promote placement in the regular job market and to provide alternatives. Intensified and individualized information, placement and counselling services, training schemes to overcome inadequate skills, subsidies for enterprise-based on-the-job training, special job

creation programs together with financial and managerial assistance for self employment seem to be supportive measures to reintegrate the long-term - indeed all - unemployed into working life (OECD 1987a, pp. 172, 180-183).

Regional disparities

An analysis of the regional unemployment rates for the 12 EEC countries in 1987 showed among other things that regions on the periphery of Europe, such as the South of Italy, the Iberian countries, parts of Turkey, Ireland, Scotland and the northern regions of Scandinavia, suffer from their geographical isolation and have high unemployment.

One explanation for these regional disparities is that economies of scale tend to be more effective in central regions. Another is that central governments only became interested in intra-national regional differences in recent years. So a whole set of policy measures must still be developed, especially to help particularly disadvantaged regions to generate the growth which will enable them to overcome the "mismatch" between local labor supply and available jobs (OECD 1989d, p. 98).

Particularly within the common European market, a regional structural policy will gain importance if there is not to be undesired migration. In the statements of the EEC Commission, it is assumed that instead of low skilled workers migrating from the peripheral regions to the industrial regions as in the past there will increasingly be a flow back and forth of qualified workers emigrating and immigrating in all directions without forming large migratory streams. This, however, presupposes that the European labor market is much more balanced than it is today. The EEC countries will enter the common internal market in 1992 with considerable differences in conditions owing to existing regional disparities. There is the danger that this will cause qualified and mobile workers from the peripheral, economically underdeveloped regions to migrate to the industrial centres. The advantage of low wage costs in the peripheral regions is unlikely to be sufficient to compensate for the inadequate qualification potential and the underdeveloped infrastructure when it comes to competing for production locations. Therefore the aim of the common market to create a balanced regional economic development will not be attainable without state assistance. The planned doubling of expenditure within the framework of the EEC Regional Development Fund must be seen in this context (Vogler-Ludwig 1989).

The continuing high - and probably also permanent - unemployment has caused all European market economies to establish a number of labor market programs, directed both at those already seeking work and - preventively - at those threatened by unemployment. The OECD distinguishes between seven program categories (see OECD 1988b, pp. 86-88 and country tables pp. 93-114).

- "Employment services including placement, counselling, vocational guidance and mobility supports...
- Labor market training (other than special measures for youth and the disabled), including subsistence allowances to trainees and the cost of courses ..., subsidies to employees for in-firm training ...
- Youth measures, mainly special schemes to promote the transition from school to work, such as subsidised work experience, subsidised training for young people with labor market problems, and direct job creation...
- Direct job creation and employment subsidies (other than special measures for youth and the disabled) ...
- Measures for the disabled. Vocational rehabilitation, employment subsidies and sheltered work...
- Unemployment compensation, including all kinds of schemes which involve cash benefits to compensate for unemployment, except early retirement...
- Early retirement for labor market reasons..."

In 1987 Denmark and Ireland already spent more than 5 per cent of their GDP as public expenditure on labor market programs; in Belgium and the Netherlands it is more than 4 per cent; France and Spain spend more than 3 per cent; in all the other European market economies - with the exception of Switzerland -, public expenditure on labor market programs amounts to between 1 and 3 per cent of the GDP.

(3) New forms of working

The unemployment problem was alleviated particularly by the spread of new forms of working, particularly noticeable since the first oil crisis. Problems of definition and measurement make it difficult to describe these new forms of working; this applies especially to informal and home-based working. Three other forms of working, which have emerged increasingly in the last decade or so, have been analyzed in depth by the OECD: (a) part-time employment, (b) temporary jobs, and (c) self-employment.

Part-time employment

Part-time employment is defined by the ILO as "regular, voluntary work carried out during working hours distinctly shorter than normal". The proportion of part-time employment to total employment in European market economies in 1987 ranged between 5 per cent in Italy to over 25 per cent in Sweden and the Netherlands (OECD 1988b, p. 21). In the long term, between 1973 and 1987 this share grew substantially, especially for Belgium (from 2.8 per cent to 9.4 per cent) and the Netherlands (from 4.4 per cent to 25.3 per cent); it doubled for example, in Finland, France and the Federal Republic of Germany (OECD 1988b, p. 149). Part-time work is particularly popular with all groups of women, male teenagers and over 65-year-old men.

Part-time jobs are to be found primarily in the service sector. Whereas mass production and capital-intensive industries rely predominantly on full-time employment, part-time jobs are offered in the services because these frequently have predictable short-run variations in demand, which can be covered by part-time workers as a "back-up" for full-time staff. One example of this is the distributive trades, especially the retail trade, where the proportion of part-time jobs ranges from 5 per cent in Italy to over 30 per cent and more in Norway, Sweden and the United Kingdom. In France a fifth of all female part-time jobs are in cleaning, laundry and house-keeping services; 90 per cent of the women employed in these industries work part-time. But in many countries a quarter to a third of work-places in industries such as social, community and personal services are also organized as part-time work (OECD 1987a, pp. 30-33).

Temporary jobs

Temporary jobs describe another recent labor phenomenon in European market economies. "Temporary jobs may include those of a seasonal or casual nature, those with a formal fixed-duration contract, or short-term hires" (OECD 1987a, p. 35). The proportion of temporary jobs in 1985 ranged between 4.7 per cent in Italy to 12.3 per cent in Denmark. With the exception of Italy, it increased in all countries, but it still remains quite small. The reason may be that temporary jobs are usually common in agriculture, where employment is seasonal and depends on casual labor. Temporary jobs are underrepresented in manufacturing and tend to be located increasingly in industries such as the distribution trades and other services (OECD 1987a, pp. 35-36).

A majority of these temporary jobs are taken by young people: their share ranges from 31 per cent in Italy to over 60 per cent in Denmark, France and Luxemburg. Temporary jobs

thus appear to be a useful working arrangement for teenagers and young adults still attending school or higher education. But part of the over-representation of young people can also be attributed to the creation and expansion of government programs to help young people during the "transition period" (see "youth unemployment" above). In all countries temporary jobs tend to be part-time rather than full-time, which explains why - with the exception of France and Denmark - women may be over-represented in temporary employment too.

Self-employment

Self-employment "covers employers and own-account workers, i.e., persons who operate their own economic enterprise or who follow a profession or trade on their own account, whether they employ other persons or not" (OECD 1986, p. 43). Self-employment was a special feature of the agricultural sector where the secular decline has caused the number of self-employed to decrease or stabilize at a low level.

On average across European market economies, about one in every ten workers is self-employed in the non-agricultural sector. The highest proportions in self-employment are in Southern Europe (18-27 per cent in 1984); the lowest are in the Netherlands (4.9 per cent) and the Scandinavian countries (4.6 per cent to 7.3 per cent of total civilian employment). At the beginning of the 1980s, the period from which there is data available, about 40 per cent of self-employed were active in wholesale and retail trade, restaurants and hotels (ranging between 25 per cent in Norway and over 50 per cent in Belgium and the Netherlands). Around 20 per cent run their business in community, social and personal services (ranging from 8 per cent in Spain to 36 per cent in the Federal Republic of Germany).

In several countries (Finland, Norway, Spain, Sweden), more than 40 per cent of these self-employed were production and related workers, transport equipment operators and laborers; and about 20-30 per cent were sales workers. But higher level occupations like professional and technical, administrative and managerial workers accounted for a further 20-30 per cent of the self-employed - and these tend to be those areas in which self-employment may grow most rapidly. This is connected, on the one hand, with the growth of the service sectors (see below), on the other, with the high proportion of women and young people in self-employment in most countries (OECD 1986, pp. 43-65). The effects of the business start programs in European market economies must also be taken into account.

The development of employment in the European market economies has thus been stabilized by the spread of new forms of working. This development has not gone uncriticized. Especially the employee organizations and labor agencies fear that this will lead to a prevalence of "unprotected work arrangements" without the protection of labor, social and tarif law of full-time employment contracts. Another objection is that these new forms of working often are to be found in low-quality occupations and that the number of those who are taken over in a regular permanent capacity is only very low. For this reason there are increased demands for "all employees to be fully integrated into the social security system irrespective of the length of employment or the level of income". Furthermore, part-time work should offer the same opportunities for further training and thus promotion as full-time work. Only then will part-time work cease to be the reserve of women and become more attractive for men who were previously in full-time employment (Engelen-Kefer 1988, p. 116).

D. Structural change

For a long time the "three sector" hypothesis developed in the 1950s by Clark, Fisher and Fourastié served as a model to explain longer-term economic structural change. According to this model, a shift in production and employment takes place in the long term from the primary via the secondary to the tertiary sector. This is based on both demand- and supply-oriented arguments: with relatively stable consumer behavior and increasing per capita income, the demand structure shifts from basic needs (primary sector) to higher value long-life industrial goods (secondary sector) to the services (tertiary sector). Moreover, in the long run advances in productivity achieved in the primary and secondary sector allow labor to be released in favor of the service sector, which meets a highly individualized range of supply and demand. This basic hypothesis has been complemented by the theory of the "post-industrial society", which reckons with an expansion of the employment volume in the subsectors health, education, research and state administration, and reflections on the "information society", postulating a growth in employment with the spread of new information and communications technology.

(1) Structural change: trends and perspectives

The structural change in European market economies in the economy as a whole largely followed the trends described by this approach, but also showed additional trends. The first important sectoral shift over the post-war period has been that from agriculture to manufacturing and the second, over the last twenty years or so, has been towards the services. A comparison of the structure of employment by sectors of the three major

European market economies - France, the Federal Republic of Germany, and the United Kingdom - between 1973 and 1987 still shows a decline in the share of total employment for agriculture (France -4.2 per cent; Federal Republic of Germany -2.1 per cent; United Kingdom -0.6 per cent), but the strongest employment decline took place in manufacturing (United Kingdom -10.4 per cent; France -6.1 per cent; Federal Republic of Germany -4.8 per cent). In contrast, the total service sector was able to markedly raise its share in total employment (France +12.9 per cent; United Kingdom +12.4 per cent; Federal Republic of Germany +9.2 per cent).

"There are large variations within service sectors, with growth fast in finance, insurance, real estate and business services, considerable in community, social and business services, and positive but generally below 1 per cent per year in share terms, in wholesale and retail trade" (OECD 1989d, p. 163). A study on changes in employment structures across 57 industries in seven EEC countries (Belgium, Denmark, France, Federal Republic of Germany, the Netherlands, Spain, United Kingdom) permits even more differentiated insights into the pattern of growth in the services and of decline in manufacturing (see table III/3).

Changes in employment structure across sectors and industries go hand in hand with job losses and job gains. For example, for the period 1978-1984, annual job gains ranged from 8.3 per cent of total employment in the Federal Republic of Germany to 11.4 per cent in France and Sweden; job losses ranged from 8.2 per cent in the Federal Republic of Germany to 12 per cent in France and 12.1 per cent in Sweden (OECD 1987a, p. 101). These figures show that a job has an average life of 8 to 12 years, while the number of jobs obviously regenerates more quickly in France and Sweden than in the Federal Republic of Germany. This means that an extensive economic structural change no longer takes several generations, but must be borne and dealt with by the same generation in shorter cycles[6)].

Which occupational groups are affected by job losses or job gains largely depends on the national economic structure of the particular country. Job losses are recorded, for example, for most European market economies in the occupational group of "agricultural workers". In Greece, however, but also in Austria, at least "certain agricultural jobs" belong to the fastest growing occupations. On the whole, however, the growing and declining occupations (see table III/4) correspond to the changes in employment structure across industries (see table III/3). In general, and at least in the early 1980s, job losses were more likely to occur in occupational groups with lower skills, whereas job

Table III/3:

Changes in employment structure across industries in seven EEC countries[a] (1977-1986)

Declining industries in all 7 countries	Average share in total employment 1986	Growing industries in all 7 countries	Average share in total employment
Oil refining	0.13	Hotels and catering	2.63
Production of metals	0.99	Travel agents	0.72
		Banking and finance	2.68[b]
Mineral mining and products	1.25	Real estate and business services	4.34
		Public administration and defence	8.95[b]
Metal manufacture	2.47	Sanitary services	1.44
		Education	7.48[b]
Other means of transport	0.94	Health and veterinary services	5.74
Textile	1.27	Otherpublic services	4.82
Footwear and clothing	1.30	Recreational and cultural services	1.40
Timber and wooden furniture	1.25		
Paper, printing and publishing	2.01		
Building and civil engineering	6.21		

a) Countries are Belgium, Denmark, France, Germany, the Netherlands, Spain and the United Kingdom

b) Growing industries in 6 countries only

Source: OECD Employment Outlook, 1989, pp 165-166

gains were reported for skilled and highly skilled professional, technical and managerial occupations.

Whether these trends in the sectoral pattern will continue in European market economies in the future is an open question. On the one hand, there could be a deceleration in the pace of structural changes. The decline in employment in agriculture, mining, iron and steel will probably be reduced, as more sustainable levels of employment have now been achieved. Change may also become slower (OECD 1989d, p. 170) in "office machinery and data-processing equipment production, where the pace of innovation may slow; banking and finance, where some of the growth has reflected one-off liberalisation of financial regulations; and business services, whose growth may have reflected responses to tighter regulation of employment practices in the 1970s (leading firms to hive off some activities) and to sharp increases in company profitability in the 1980s".

The rapid growth of employment in the services could also decrease, as it is based largely on the strong increase in part-time jobs; part-time working could be expected to slow, however, as the female labor force will not greatly increase and the part-time work rate amongst females is approaching saturation level, especially in the Scandinavian countries. Although in many countries, such as, for example, the Federal Republic of Germany (Rürup 1989, pp. 87-88), a further increase in labor-intensive government services does appear possible, its effect on change will depend upon public finance considerations.

"On the other hand, further movements of the industrial share in total employment ... could even involve an acceleration of change. Thus underlying forces of productivity growth and induced changes in demand may help to drive structural change at rates similar to those experienced in recent years" (OECD 1989d, p. 170). The implications of the new technologies could support this prognosis.

(2) New technologies as pressure for structural change

The further advance of several new technologies - information technology, bio-technology, materials and space technology - is expected to be an important source of pressure for structural change in the European market economies. Particularly information technology (IT), with its combination of computer technology, micro-electronics and telecommunications, promises to have a wide field of application and a strong impact across all sectors of the economy. In a ranking of the economic significance of several generic technologies undertaken by a high-level experts group on the social

TABLE III/4: Reports of national experts on the fastest growing and declining occupational groups in the early 1980s

Country	Fastest growing occupations	Fastest declining occupations (or slowest growing)
Australia	Professional, technical, related and clerical workers; retailers; managers and self-employed	Laborers; textile workers; metal and electrical production-process workers; agricultural workers
Austria	Certain agricultural jobs; service jobs	Manufacturing jobs; miners; textile workers; foundry workers
Canada	Food preparation and food services workers; communication workers; electrical machinery repair workers; technicians and technologists	Certain engineering jobs and lower skilled jobs that have become more complex; miners and other workers in mineral extraction; garment, footwear and textile workers; clerical workers who are not using information technology
Denmark	Construction workers; private sector service workers	Public sector service workers; administrative occupations;agricultural workers
Finland	Skilled technical workers; human service workers	Agricultural workers; machine operators and other "industrial occupations"
France	Clerical workers; retailers; medical and social service workers; managers	Laborers; unskilled workers
Germany	Research, training, management and other white collar administrative jobs based on information technology; machine repair and maintenance	Office workers who are not using information technology; transportation of goods; installation and repair of manufacturing equipment
Greece	Agricultural workers; computer-related occupations; paramedical workers; tourism occupations; construction workers	Public service workers
Ireland	Professional/techn. and clerical workers	Agricultural workers
Italy	Business services occupations; retailers	Agricultural workers
Japan	Profess. and techn. workers; retailers; clerical and related workers; laborers	Miners; agricultural workers
Netherlands	Managing personnel in administrative functions; directors and managers in trade; statisticians, computer scientists; foremen	Craft and industrial skills not specified; wood workers, furniture makers; brick layers, carpenters; shoe repairing, leather working; independent traders (excluding retail trade)
Norway	Public administration; chemical workers; teachers; medical care workers; clerical workers using information technology	Textile workers; agr., forestry workers; fishers; clerical jobs other than typing and not using information technology
Portugal	Plastic and rubber workers	Painters; carpenters
Spain	Highly-skilled service workers; hotel managers; public services, safety and protection workers; retailers	Manufactering workers, especially textile workers; low-skilled administrative workers
Switzerland	Middle-level office workers;med. service and health workers; managerial workers; teachers; low-level service workers	Professionals with low levels of qualifications
Turkey	Service workers; production workers	Agricultural workers
United Kingdom	Highly-qualified service workers; managerial and administrative workers	Craft workers and low-skilled industrial workers
United States	Techn. and profess. occupations in the medical and computer fields such as medical assistants, physical therapists, podiatrists and computer programers	Private household workers; agricultural workers; machine operators (manufacturing, especially); administrative support, including clerical

Source: Data developed by the Secretariat; OECD Employment Outlook 1988, p. 189

aspects of new technologies (OECD 1988c, p. 36), IT ranked by far the highest in terms of such characteristics as: range of new products and services; improvements in costs or technical attributes of existing processes, services and products; social acceptance; strength of private industrial interest; sectors of application; and probable overall employment impact in the 1990s.

Implications for production and services

The potential of IT for initiating major structural changes in the economy is underlined by the following main features (see OECD 1988c, pp. 39-40), allowing for:

- large-scale integration of electronic circuits to store, process and communicate information; this facilitates the integration and control of all types of production and service activities: "the capability to integrate design, manufacture, procurement, sales, administration and technical service in any enterprise encourages a tendency towards computer-integrated manufacturing and all-electronic office systems" ... as does its "capability to link up networks of component and material suppliers with assembly-type firms (e.g., the motor car industry) or with service firms (e.g., the hotel and catering industries)";

- greater flexibility, as it replaces to some extent the "economies of scale" by the "economies of scope" phenomenon: small-scale production may become more economic, products and processes may be redesigned and changed more easily, thus permitting a more rapid and sensitive response to daily changes in time constraints, resources availability, factor prices and/or consumer demand;

- savings, as on-line monitoring and control may improve the quality of products, processes and services; most obvious are the savings in inventories (e.g., clothing and furniture industries), but it also "reduces the number of rejects and wasted components for both intermediate and final output ...; this leads to substantial savings of materials and energy, as well as to a process of structural change involving the loss of jobs in some metals and metal goods sectors and an increase in jobs in some sectors of the electronic components industry, electronic products and producer services".

Implications for employment

As the introduction of IT in the European market economies coincided with the development of high rates of unemployment in these countries, the labor-saving effects of the new technologies became - and indeed remain - a strongly emphasized labor market issue. The experiences of past economic history suggest that labor which is released finds reemployment, even if it involves certain problems of adaptation ("compensation hypothesis"). This is also confirmed by empirical studies, which show that "the consistent application of new technologies predominantly results not in redundancies, but in new jobs. The reason for temporary employment problems lies in delayed adaptation by the labor force to the changed conditions in the work world caused by the new technologies,

for instance, when it comes to shortages of adequately qualified personnel which occur when new technologies are introduced" (Oppenländer 1988, p. 318). In order to study this more closely, in 1989 the Commission of the European Communities commissioned a research project: "Macro-economic and Sectoral Analysis of the Employment and Educational Perspectives in the Area of Information Technology within the European Community".

Implications for skill profiles

As two U.S. experts point out in a recent UNESCO paper (Levin/Rumberger 1989, pp. 16-19), the increasing use of IT does not necessarily mean that skill requirements must be raised: "Most persons who use computers require no special computer skills ... (they) need only learn how to operate a new piece of equipment", for which a training of about 30 hours has proved sufficient.

To date the application of information technology in both manual and non-manual work has shown that it replaces low-skilled work, but complements high-skilled work. "The near-term labor-saving effects are therefore slanted towards the less skilled jobs in factory and office alike. In manual jobs, new technologies continue the longstanding automation of the work of assemblers, laborers, packers and other members of the subcraft industrial workforce. Compositional changes are expected to be even more dramatic in the white-collar area, where the vast increases in the productivity of information-handling is expected to lead to reduced employment rates for the less skilled clerical employees" (OECD 1988b, p. 188). The implications of information technology for the occupational profile of a sector can, therefore, vary greatly. The service sector can act as an illustration of this: on the one hand, there has been a growth in the information- and knowledge-based occupations with high demands as regard qualifications and wide possibilities for applying information technology, while, on the other, there is a wide range of personal services which remain largely unaffected by information technology and also relatively unskilled.

Nonetheless, a polarization of workers in the form of "deskilling low-skilled" and "upskilling high-skilled" workers is not expected to take place. Many observers assume that there will be a gradual change in the "employment pyramid", which traditionally consisted of a wide base of unskilled and semi-skilled workers, directed and overseen by the "middle class" of supervisors and middle management, with the highly qualified professionals, who made the decisions, at the top of the pyramid. In contrast to this "pyramid", the prognoses postulate the model of an "orange", or an "onion", or a

"diamond": a reduced base of unskilled workers and a large bulge in the middle with a broad and multi-skilled work-force.

As Levin and Rumberger (1989, pp. 18-19) summarize: "Thus the evidence suggests that the *level* of skills required in the job market are unlikely to change appreciably in the near future. What is more likely to change are the *types* of skills required as new technologies and new forms of work organization demand different kinds of skills". This change in the nature of skills may be illustrated by a comparison of "old" and "new competencies" in banks and insurance companies (see table III/5).

TABLE III/5: The changing nature of skills in banks and insurance companies

Old competencies	New competencies
General	
1. Ability to operate in well-defined and stable environment.	Ability to operate in ill-defined and ever-changing environment.
2. Capacity to deal with repetitive, straightforward and concrete work process.	Capacity to deal with non-routine abstract work process.
3. Ability to operate in a supervised work environment.	Ability to handle decisions and responsibilities.
4. Isolated work.	Group work; interactive work.
5. Ability to operate within narrow geographical and time horizons.	Comprehensive grasp of systems; ability to operate within expanding geographical and time horizons.
Specific *Among upper-tier workers*	
1. *Generalist.* Broad, largely unspecialised knowledge; focus on operating managerial skills.	*New expertise.* Growing need for high-level specialised knowledge in well-defined areas.
2. *Administrative.* Old leadership skills; routine administration; hierarchical, carrot-and-stick personnel management approach; ability to carry out orders from senior management.	*New entrepreneurship.* Capacity to not only manage but set strategic goals; to share information with subordinates and to listen to them; to motivate individuals to develop new business opportunities.
Among middle-tier workers	
1. *Procedural.* Specialised skills focused on applying established clerical procedural techniques involving the capacity to receive and execute orders.	*Customer assistance and sales.* Broader and less specialised skills focused on assisting customers and selling capacity; to define and solve problems.
Among lower-tier workers	
1. *Specialised skills* focused on data entry and data processing.	Disappearance of low-skill jobs.

Source: OECD 1988c, p. 106

Since the traditional organization of work according to Taylorist principles will increasingly be replaced by group and team work, the communicative and social "virtues" will become increasingly important in addition to job skills for a successful professional life. Examples of such qualifications are: "the ability and willingness for team-work, which includes openness, having one's own opinion, courage, being able to listen, humour and social compatibility; insight into technical and organisational relations and social processes; the ability and willingness to learn; the ability for abstract thought and creativity; a quick mind and a high degree of flexibility; deep sense of responsibility (towards the product, one's own performance and one's colleagues)" (Schulz 1987, p. 175; see also Levin/Rumberger, 1989, pp. 34-37).

Apart from the farreaching possible implications of this for both formal and informal education and training, the European market economies face the challenge of rethinking their education and training system in order to accommodate IT. A German expert has urged that "everyone should be in a position to handle information technology. It is essential to provide instruction leading to a sort of 'driving license' in information technology" (Oppenländer 1988, p. 321). As a consequence, countries like the Federal Republic of Germany are concentrating on a "basic education in information technology" within the framework of their school curricula, since the formal education system is regarded as "a key policy medium for stimulating a long-term response to new technology" (OECD 1988c, p. 102).

E. Human capital formation

Structural change and technological renewal in European market economies have meanwhile led to a growing awareness of "human capital formation" as a strategic factor in economic performance. "It has become increasingly evident that a well-educated and trained labor force is crucial to the process of adjustment to economic change and technological innovation - and indeed is critical to the competitiveness of individuals, enterprises, and entire economies" (OECD 1989d, p. 81). The labor market context is thus becoming an important incentive for international agencies and national authorities in European market economies to review and reshape their education and training policies and systems.

(1) The human capital of the working-age population

With certain reservations (see OECD 1989d, p. 48), the educational attainment of the working-age population can be used to measure the "human capital stock" of a national economy. Over the past two or three decades there has been conspicuous capital

accumulation in all European market economies. In an analysis of intertemporary differences in the educational attainment profile of the working-age population in the OECD countries (OECD 1989d, pp. 52-58), five attainment levels were distinguished, with "Level A" standing for "completed less than upper secondary education" and "Level E" for "completed at least one university degree".

Human capital formation in OECD countries is still "dominated by a large share of persons at Level A. That share is shrinking, however, particularly among younger age groups, as a result of the expansion of education opportunities in the 1960s, which has greatly increased the number of persons with upper secondary and post-secondary qualifications. This pattern is especially marked among females, for whom the proportion at Level A has decreased faster than for males, while the proportion at Level E has increased faster". In Table III/6 these changes are calculated as annualized changes in population shares by attainment levels in six European market economies.

TABLE III/6: Annualised changes in population shares by attainment levels in selected OECD countries

Country		Level of education				
		A	B	C	D	E
Austria	1981-87	-5.83	1.54	7.32		12.30
Belgium	1970-87	-1.28	5.77			3.07
Germany	1978-87	-2.16	-3.75	0.90	4.20	2.75
Italy	1980-87	-1.32	-4.91			3.60
Norway	1972-87	-5.73	6.32			5.80
Sweden	1971-87	-2.71	1.86	5.31	7.08	5.60

Source: OECD 1989d, p. 57

Educational attainment and unemployment

There are many supply-side and demand-side factors which determine the relationship of educational attainment and unemployment in an economy at a given time. A comparison of the difference in age-unemployment profiles at different educational attainment levels for OECD countries (OECD 1989d, pp. 58-69) confirms, at least for the last two decades or so, "that education reduces the likelihood of unemployment ...: the lowest levels of educational attainment are consistently associated with highest unemployment rates". By relating the unemployment rate of persons at Level A to that of persons at Level E, a ratio can be calculated which may serve as indicator for the pay-off of "more education" in the form of reduced unemployment risk (see table III/7). This relationship seems to be much weaker for women than for men.

Educational attainment and labor force participation

Several arguments support the expectation that persons with higher levels of educational attainment tend to show a higher labor force participation. An analysis of cross-section data for OECD countries shows that "the relationship between educational attainment and labor force participation varies markedly by age and sex" (OECD 1989d, pp. 70-80). But, in general, the labor force participation rate of those with the lowest educational level is likely to be lower than that of those with higher educational levels (see table III/7): this phenomenon is most conspicuous for women in most European market economies: "Females at Level E have labor force participation rates 13 to 60 percentage points higher than those of females at Level A; in contrast, the most highly educated males have labor force participation rates 5 to 31 percentage points higher than the least educated males".

TABLE III/7: Unemployment and labor force participation of persons at Level A as compared to those at Level E, 1988

Country	Ratio of the unemployment rate Level A/Level E		Ratio of the participation rate Level A/Level E	
	Males	Females	Males	Females
Austria[a]	6.88	2.04	0.761	0.393
Belgium[b]	2.81	2.91	0.729	0.383
Finland[a]	7.50	8.00	0.767	0.684
Germany[a]	4.80	1.87	0.744	0.364
Greece[a]	0.93	0.49	-	-
Italy[a]	1.87	1.66	0.886	0.431
Netherlands[a]	2.48	1.45	0.842	0.693
Norway[a]	5.50	2.00	0.779	0.254
Spain[a]	1.17	0.17	0.866	0.669
Sweden[a]	2.63	2.75	0.925	0.875
Switzerland[b]	1.00	0.86		
United Kingdom[a]	4.00	2.40		

a) Data refer to 1987
b) Data refer to 1986

Source: OECD 1989d, pp. 67, 87-88

On the basis of this analysis of educational attainment and labor market performance, several policy recommendations may be made for European market economies in the years ahead:

- There is a growing need - for both employers and society - for an understanding of the potential of informal education, training and structured experiences, which cannot be measured or evaluated using the proxy criterion of formal educational attainment.

- Intervention through education and training to prevent unemployment should be aimed at raising the educational attainment of the least educated, who are at the highest risk of becoming and remaining unemployed.

- Since the actual labor market status of females conforms neither to basic human rights, nor to the self-concept of many women, nor to their educational attainments, supporting measures (e.g., child-care provision, even-hand job protection) should be introduced to help them to fulfil their individual life plans.

- In countries with declining youth cohorts, young people may be attracted by forms of employment which offer them the chance of making a "quick buck" and cause them to give up further schooling and vocational training at an early stage. Policy-makers must try to make long-term careers, which are an investment in human - and societal - capital, adequately attractive.

- The labor market situation for workers past 55 or even younger needs special attention; they are overstrained in many respects by changes in their jobs, in the factory - and perhaps also in family and society. Like physical equipment, human capital should be given additional investment so that instead of becoming obsolete the accumulated fund of experiences may be used for working and/or social life.

(2) Implications for education and training policies

The economic and social value of the human capital of a given population is not only a question of the amount of time spent in school or the number of persons at higher levels of educational attainment. There is also an increasing awareness of the importance of the quality of education and training.

First, the preparation of young people for adulthood "should be of general character, covering both cognitive and affective aspects of child development" (Papadopoulos 1988, p. 6). What is needed is a "new consensus" on the curriculum elements of "high quality basic education."

Secondly, the highly specialized initial training for a profession with its orientation towards the traditional division of labor will have to increasingly yield to a broad basic training which is applicable to numerous professional activities. In the European market economies, new qualification profiles will have to be developed in cooperation with and between employers and unions - such as, for example, in Germany, where the 37 skilled

trades in the metal industry have been reduced to 6 non-specialized basic trades with 17 specialist slants. The agreement on this between the tariff partners states that the qualification profile should enable the future skilled worker

- "to exercise the trade he has learnt in various firms and branches and to carry out related skilled activities, if necessary after acquiring skills which he might lack;
- to adjust flexibly to new work structures, production methods and technologies with the aim of maintaining the validity of his professional qualification;
- to participate in further training, upskilling and reskilling in order to maintain his professional qualification and mobility" (Schmidt 1989, p. 9).

When "the 'half-life' of any given vocational qualification is shrinking in the face of technological innovation and rapid changes in working techniques", then "there is an increasing premium on such types of formal education that provide people with the kinds of skills and competences that improve, first, their adaptability (rather than giving them over-specialised qualifications), and, second, their ability to learn on the job and undertake further education and training to update their qualifications..." (Wurzburg 1988, p. 11).

Thirdly, school is becoming less and less the only place of learning where the qualifications for economic and social activities can be transmitted and acquired. This means that the formal educational system must open up to the "real world", but also that the schools, institutions of vocational training, and the universities must redefine their position in a "plurality of learning locations."

Fourthly, enterprise-level training will become an even more important medium of human capital formation than it already is.

The probable changes in work content and work organization is causing the managements particularly of larger firms within the European market economies to develop strategies for company-based qualifications, that is, to assess in the middle and long term "what qualifications the firms believe they will need in what quantities and at what time, in order to achieve their objectives, and with what means or measures these qualifications are to be created or ensured" (Meyer-Dohm 1989, p. 2). Human resource development will thus become a strategic management task, whereby personnel planning is developed out of investment planning, translated into concrete measures for acquiring and developing personnel and linked with in-company educational planning.

Fifthly, human capital formation, which is less and less able to rely on a single period of initial training but requires numerous additional investments in the form of training experiences over the span of a life-time ("life-long learning"), calls for extensive information, guidance and counselling services.

Sixthly and finally, "the educational system must contribute to creating a counterbalance to the technological and rationalized world, by developing the individual's creative, cultural and social faculties" (Oppenländer 1988, p. 321). Even if "adaptability" and "flexibility" are the most important challenges facing education, when it comes to reviewing educational and training policies and reshaping the related systems the humanistic dimension should not be forgotten.

NOTES

1. Shortly before his assassination, Alfred Herrhausen, the internationally renowned German economic and finance expert delivered the Third Arthur Burns Memorial Lecture (1989), in which he assessed the growth potential of the EEC internal market as follows: "The program for completing the common market in 1992 is progressing much more rapidly than the pessimists had anticipated, but more slowly than the optimists had hoped. The scheduled timetable will largely be met. There are many signs that the impulses for growth and employment deriving from 1992 will be stronger than the so-called CECCHINI report predicted. They will also take effect earlier. The chances of strong growth in the EEC countries until the beginning of the 1990s are good. All this has placed Europe in a better position to cope with a possible recession in North America than it was in the 1970s and early 1980s."

2. "If participation rates had remained at their 1975 level, the population increase would have brought about a rise of 5.5 million in the number of males in the labor force. However, the fall in male participation rates reduced the number by 2.4 million, resulting in an overall rise of only 3.1 million in the number of males in the labor force in Europe-9 between 1975 and 1985. If participation rates had remained at their 1975 level, the population increase would have brought about a rise of 3.2 million in the number of females in the labor force. However, the rise in female participation rates put up the number by 6.6 million, resulting in an overall increase of 9.8 million in the number of females in the labor force in Europe-9 between 1975 and 1985." (Eurostat 1988, pp. 5, 10).

3. In the Federal Republic of Germany, for example, the rise in the number of employed of around 500,000 during the boom years 1978 and 1979 only reduced the number of registered unemployed by 150,000 persons. If demographic factors and migration are taken into account, this still means that around 60,000 persons must have come from the "hidden reservoir" of discouraged workers. A representative survey of German women showed that in 1978 at least 350,000 women, three quarters of whom could have taken up a job immediately, were "discouraged" (Klauder 1988, pp. 104, 111).

4. On the basis that 1979 = 100, employment in all OECD countries rose to almost 110 by 1989. The development of employment in Japan followed this average index. For the United States and Oceania (Australia and New Zealand) the index rose to 118. In contrast, the European market economies could only achieve an improvement of 102, whereby Central and Western Europe just managed to regain the 1979 level, whereas Southern Europe reached 106 on the index and the Scandinavian countries 107.

5. In 1983 the OECD had demanded for the period of 1984-89: "20,000 extra jobs will be required every day during the last five years of this decade if OECD unemployment is to be cut to its 1979 level ..." (OECD 1983, p. 7). In 1989 they had to realize that this goal had not been attained - on the contrary, some countries will have to increase their annual employment growth rate beyond the actual growth rate in order to achieve at least the 1979 unemployment level in 1995 (OECD 1989d, p. 20).

6. This also means that the number of jobs which are completed in the course of a work life increases. Since there is no available data for the European market economies, the United States and Japan must serve as examples (OECD 1984, p. 63) of this trend towards more frequent job change (shorter job tenure): "An average male worker in the United States can expect to work in about 7.5 jobs over his life-time. The average male worker in Japan can expect to complete about 2.6 jobs. A Japanese worker terminates as many jobs in his lifetime as a typical American worker would have terminated about 25 years ago".

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APPENDIX

Appendix 1: Demographic projections for the market economy countries of the European region (1980 - 2050)

Millions

Countries	Age-group	1980	1990	2000	2010	2020	2030	2040	2050
Austria	0 - 4	0.43	0.48	0.46	0.41	0.43	0.40	0.39	0.39
	5 - 14	1.11	0.87	0.98	0.88	0.83	0.84	0.79	0.79
	15 - 64	4.80	5.09	5.04	5.01	4.84	4.44	4.19	4.11
	65 or more	1.16	1.11	1.13	1.30	1.46	1.70	1.73	1.50
	Total	7.51	7.56	7.61	7.59	7.56	7.39	7.11	6.79
Belgium	0 - 4	0.61	0.61	0.55	0.50	0.51	0.49	0.48	0.48
	5 - 14	1.36	1.20	1.20	1.06	1.00	1.00	0.96	0.96
	15 - 64	6.46	6.61	6.51	6.54	6.19	5.67	5.32	5.09
	65 or more	1.42	1.39	1.46	1.51	1.74	1.98	1.94	1.76
	Total	9.85	9.81	9.72	9.60	9.44	9.14	8.71	8.29
Denmark	0 - 4	0.31	0.27	0.25	0.21	0.21	0.21	0.20	0.21
	5 - 14	0.75	0.58	0.53	0.48	0.41	0.42	0.42	0.40
	15 - 64	3.32	3.45	3.43	3.24	2.94	2.60	2.30	2.16
	65 or more	0.74	0.78	0.73	0.79	0.90	0.96	0.98	0.86
	Total	5.12	5.08	4.94	4.73	4.46	4.19	3.91	3.63
Federal Republic of Germany	0 - 4	2.93	3.21	2.83	2.25	2.40	2.28	2.14	2.22
	5 - 14	8.26	5.90	6.39	5.22	4.53	4.77	4.42	4.29
	15 - 64	40.83	42.33	40.24	37.56	34.25	28.87	25.73	24.26
	65 or more	9.55	9.51	10.11	11.38	11.38	12.53	12.55	10.26
	Total	61.57	60.95	59.56	56.42	52.56	48.46	44.84	41.03
Finland	0 - 4	0.32	0.31	0.27	0.26	0.25	0.25	0.24	0.24
	5 - 14	0.65	0.65	0.60	0.53	0.51	0.50	0.49	0.48
	15 - 64	3.24	3.35	3.39	3.34	3.03	2.78	2.63	2.48
	65 or more	0.57	0.66	0.72	0.83	1.05	1.11	1.01	0.95
	Total	4.78	4.97	4.98	4.95	4.84	4.63	4.37	4.15
France	0 - 4	3.69	3.86	3.58	3.26	3.29	3.29	3.18	3.14
	5 - 14	8.28	7.52	7.57	6.93	6.48	6.56	6.48	6.30
	15 - 64	34.25	37.03	37.64	38.83	37.17	35.15	33.43	32.43
	65 or more	7.50	7.77	8.71	9.33	11.34	12.63	12.93	12.27
	Total	53.71	56.18	57.50	58.35	58.27	57.63	56.02	54.14
Greece	0 - 4	0.72	0.64	0.63	0.60	0.57	0.55	0.52	0.50
	5 - 14	1.48	1.37	1.26	1.23	1.16	1.11	1.07	1.02
	15 - 64	6.18	6.67	6.63	6.66	6.55	6.28	5.94	5.65
	65 or more	1.27	1.25	1.51	1.70	1.80	1.93	2.02	1.96
	Total	9.64	9.93	10.04	10.19	10.08	9.88	9.55	9.13
Ireland	0 - 4	0.35	0.31	0.29	0.28	0.27	0.29	0.28	0.26
	5 - 14	0.69	0.68	0.61	0.57	0.55	0.56	0.58	0.55
	15 - 64	2.00	2.24	2.53	2.74	2.80	2.77	2.70	2.63
	65 or more	0.37	0.41	0.43	0.45	0.52	0.63	0.74	0.82
	Total	3.40	3.65	3.86	4.04	4.14	4.25	4.31	4.26
Italy	0 - 4	3.66	3.34	3.18	2.57	2.60	2.71	2.54	2.55
	5 - 14	8.89	6.62	6.69	6.00	5.05	5.29	5.31	5.04
	15 - 64	36.84	39.24	38.14	37.42	35.47	31.76	28.27	27.02
	65 or more	7.68	7.97	8.75	9.58	10.18	11.21	11.91	10.21
	Total	57.07	57.18	56.75	55.56	53.31	50.97	48.02	44.82
Luxembourg	0 - 4	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
	5 - 14	0.05	0.04	0.05	0.04	0.04	0.04	0.04	0.04
	15 - 64	0.25	0.26	0.25	0.25	0.24	0.23	0.22	0.22
	65 or more	0.05	0.06	0.07	0.07	0.08	0.08	0.08	0.07
	Total	0.37	0.38	0.38	0.38	0.38	0.38	0.36	0.36

Netherlands	0 - 4	0.89	0.92	0.90	0.77	0.79	0.75	0.70	0.73
	5 - 14	2.27	1.78	1.86	1.71	1.53	1.56	1.45	1.40
	15 - 64	9.36	10.22	10.38	10.38	9.71	8.81	8.13	7.81
	65 or more	1.63	1.89	2.04	2.27	2.81	3.35	3.42	2.97
	Total	14.15	14.81	15.18	15.13	14.84	14.47	13.70	12.91
Norway	0 - 4	0.26	0.27	0.26	0.23	0.24	0.24	0.23	0.24
	5 - 14	0.65	0.52	0.54	0.51	0.47	0.48	0.47	0.47
	15 - 64	2.58	2.73	2.84	2.90	2.80	2.66	2.53	2.48
	65 or more	0.60	0.68	0.64	0.65	0.78	0.89	0.97	0.91
	Total	4.09	4.20	4.28	4.29	4.29	4.27	4.20	4.10
Portugal	0 - 4	0.83	0.75	0.75	0.65	0.63	0.60	0.55	0.51
	5 - 14	1.69	1.49	1.48	1.41	1.25	1.22	1.14	1.05
	15 - 64	5.93	6.76	6.84	6.98	6.92	6.50	6.03	5.72
	65 or more	0.96	1.29	1.39	1.49	1.61	1.85	2.00	1.85
	Total	9.40	10.29	10.46	10.53	10.41	10.17	9.72	9.13
Spain	0 - 4	3.17	2.70	2.50	2.12	2.18	2.38	2.23	2.17
	5 - 14	6.51	5.64	5.57	4.78	4.16	4.47	4.68	4.39
	15 - 64	23.65	26.06	26.82	27.95	27.61	25.64	23.62	22.72
	65 or more	4.06	5.03	5.95	6.42	6.99	8.22	9.26	8.87
	Total	37.39	39.43	40.84	41.26	40.95	40.72	39.79	38.15
Sweden	0 - 4	0.49	0.48	0.49	0.45	0.45	0.45	0.44	0.45
	5 - 14	1.14	0.96	0.97	0.95	0.89	0.90	0.89	0.88
	15 - 64	5.33	5.43	5.49	5.40	5.19	4.98	4.76	4.68
	65 or more	1.35	1.49	1.38	1.44	1.71	1.77	1.79	1.67
	Total	8.31	8.37	8.33	8.24	8.24	8.09	7.87	7.67
Switzerland	0 - 4	0.32	0.37	0.35	0.31	0.31	0.29	0.27	0.28
	5 - 14	0.88	0.72	0.73	0.66	0.61	0.60	0.55	0.54
	15 - 64	4.22	4.48	4.41	4.23	3.90	3.49	3.22	3.05
	65 or more	0.90	0.99	1.10	1.35	1.56	1.68	1.61	1.40
	Total	6.32	6.55	6.59	6.55	6.37	6.06	5.65	5.27
Turkey	0 - 4	5.89	7.05	7.15	6.86	7.45	8.93	8.49	7.20
	5 - 14	11.36	12.38	13.96	13.84	13.51	15.40	17.50	16.01
	15 - 64	25.33	33.62	41.41	50.28	57.27	61.23	65.16	70.00
	65 or more	2.17	2.22	3.33	4.32	5.78	8.31	10.67	12.32
	Total	44.74	55.26	65.85	75.30	83.99	93.87	101.82	105.53
United Kingdom	0 - 4	3.41	3.82	3.96	3.79	3.88	3.37	3.27	3.42
	5 - 14	8.42	7.05	7.82	7.73	7.66	7.50	6.57	6.62
	15 - 64	36.08	37.26	37.28	37.91	37.35	36.28	35.56	35.05
	65 or more	8.41	8.61	8.30	8.38	9.56	11.34	11.76	10.65
	Total	56.31	56.73	57.35	57.81	58.45	58.49	57.17	55.74
All countries	0 - 4	28.29	29.41	28.41	25.53	26.47	27.49	26.19	25.00
	5 - 14	64.43	55.97	58.78	54.51	50.62	53.21	53.81	51.23
	15 - 64	250.64	272.83	279.26	287.62	284.22	270.15	259.72	257.56
	65 or more	50.37	53.09	57.76	63.24	71.25	82.19	87.39	81.31
	Total	393.72	411.30	424.21	430.90	432.56	433.03	427.11	415.10

Source: OECD Demographic Data File, medium fertility variant projections

Appendix 2: Population, Labor force, and Employment in European market economies (1987)

1987	Population of working age (in 1.000)	Total labor force (in 1.000)	Labor force participation rate (percentage)	Labor force participation rate of females (percentage)	Total employment (in 1.000)	Unemployment (in 1.000)	Unemployment rate (percentage)	Part-time employment as a proportion of total employment (percentage)*)
Central and Western Europe								
Austria	5.129	3.430	66.9	53.1	3.297	130	3.8	8.3
Belgium	6.627	4.217	63.6	52.0	3.751	466	11.1	8.6
France	36.662	24.073	65.7	55.9	21.511	2.517	10.5	11.7
Germany	42.789	28.216	65.9	51.9	26.006	2.229	7.9	12.3
Ireland	2.142	1.319	61.9	38.5	1.088	231	17.5	6.5
Luxembourg	258	172	66.6	44.3	169	3	1.6	7.3
Netherlands	10.111	5.933	58.7	41.9	4.741	451	8.7	24.0
Switzerland	4.555	3.297	72.4	54.6	3.253	24	0.7	-
United Kingdom	37.368	28.212	75.5	62.6	25.491	2.909	10.2	21.5
Southern Europe								
Greece	6.629	3.884	58.6	41.7	3.598	286	7.4	6.5
Italy	39.396	24.031	61.0	43.4	22.924	2.833	11.0	5.3
Portugal	6.394	4.522	70.7	57.4	4.170	317	7.1	-
Spain	25.453	14.675	57.7	37.5	11.451	2.957	20.5	-
Turkey	31.583	19.309	61.1	-	15.948	2.856	15.2	-
Nordic countries								
Denmark	3.429	2.799	81.6	75.9	2.614	222	7.8	23.8
Finland	3.346	2.583	77.2	72.9	2.423	130	5.1	8.1
Iceland	158	129	82.1	-	129	1	0.5	-
Norway	2.705	2.171	80.3	72.3	2.125	45	2.1	28.1
Sweden	5.411	4.421	81.7	79.4	4.383	84	1.9	23.5
OECD Europe	270.145	177.388	65.7	46.0	159.072	18.690	10.5	-

*)1986 or 1985 or nearest data available before 1987

Source: OECD Employment Outlook, July 1989. Paris: OECD, 1989, pp. 212,214
OECD Employment Outlook, Juli 1989. Paris: OECD, 1989, pp. 15,18
OECD Employment Outlook, September 1987, Paris: OECD, 1987, p. 29